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Task Force on the
Future of the
Canadian Financial
Services Sector


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Impact of Taxation on the Financial Services Sector

by
Kevin J. Dancey
Coopers & Lybrand

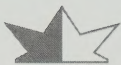
September 1998

Research Paper Prepared for the Task Force on the Future
of the Canadian Financial Services Sector



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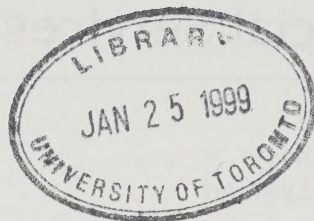
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**The views expressed in these research papers
are those of the authors and do not necessarily reflect
the views of the Task Force on the Future of the
Canadian Financial Services Sector**

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1. Introduction

This report has been prepared for the Task Force on the Future of the Canadian Financial Services Sector ("Task Force") which will release its report in September 1998 and the Technical Committee on Business Taxation ("Technical Committee") which will release its report in April 1998. Both the Task Force and the Technical Committee were established by the Minister of Finance. The Task Force and the Technical Committee have commissioned this research which focuses on the impact of the major federal and provincial taxes on the relative competitive position of domestically-owned firms supplying similar financial services, as well as on the competitive position of Canadian institutions operating internationally or in competition with foreign institutions in the Canadian marketplace. In addition, the report identifies elements of the tax treatment of financial institutions ("FIs") that might motivate them to take actions driven by tax planning considerations which would conflict with the objectives of prudential regulation.

The importance of maintaining a competitive environment for entities providing financial services needs no further elaboration. Canada has been, and will hopefully continue to be, well served by financial institutions that are internationally competitive. This industry employs over half-a-million people and provides services that are vital to the efficiency and effectiveness of the consumer, corporate, and government sectors. Maintaining a competitive environment ensures innovation and efficiency.

As a general principle, a neutral tax regime – and one that respects the basic tax design objectives of equity, efficiency, simplicity, and federal/provincial co-operation and harmonisation – is the least distortionary and the one that best encourages competitive behaviour. From an international perspective, a Canadian tax system that is not too far out of step with the U.S., will also be competitive.

Unfortunately, the current tax regime does not meet these objectives – it is an overly complicated collage of different taxes applying to different entities by different levels of government that attempts to achieve often conflicting goals in a heavily constrained and changing economic, political and institutional context. This complexity leads to significant problems in trying to analyse the competitive impacts of the application of various taxes. Accordingly, the approach taken in this study has been to not only conduct new economic analysis, but also to review other studies on the impact of taxation on the financial services sector and to solicit input directly from participants in this sector. Input from the FI sector was solicited by sending out a questionnaire (see Appendix B) to a large number of entities in the financial services sector. Approximately 20 submissions were received from a cross-section of the financial services sector. Many of the comments received have been reflected in this report.

This report contains neither a detailed description of the taxation of the entire FI sector nor detailed technical descriptions of problems and recommendations. Instead, it focuses on key issues for further study if Canada is to maintain a competitive tax environment for providers of financial services.

This report focuses exclusively on tax issues and not on any other issues which could alter the competitive landscape between different providers of financial services.

As a final matter, it is important to note that any disproportionate level of taxation on an FI is not borne by the institution itself – as with all corporate entities, institutions don't bear the ultimate tax liability, people do (see discussion in the 1996 Carter Report). Accordingly, the stakeholders in the financial services sector – customers, suppliers, employees and shareholders – ultimately bear any disproportionate level of taxation. Accordingly a disproportionate level of tax is a cost imposed on one or more of the above groups, which ultimately leads to some level of economic distortion and sub-optimal behaviour resulting in consumers and businesses:

- not getting the financial products they need (i.e. under-investing in financial services by financial service providers and discouraging consumption by consumers and businesses);
- purchasing the financial products they need but at a higher than market price (a potential problem for individuals and small businesses who do not have unrestricted access to non-Canadian financial service providers); or
- purchasing the financial products they need from non-Canadian suppliers who do not bear a disproportionate level of taxation.

As this report will indicate, there is significant evidence to support the conclusion that the current level of taxation on the financial service sector in Canada is excessive relative to both the non-financial sector in Canada and the foreign competitors with which Canadian financial service providers increasingly compete. More importantly, all the signals are that the financial services environment will become even more competitive (both domestically and internationally) and the current tax system in Canada does not leave our financial institutions well-positioned to deal with this increased competition. Indeed, many of the tax comments in this paper are predicated on the assumption that there is a competitive environment and that it is becoming increasingly more competitive. A competitive tax environment can only be justified in a sector subject to competition.

The June 1997 Task Force Discussion Paper indicated that the Task Force did not currently intend to deal with tax matters in its final report. One of the reasons for this decision was that the Task Force felt that it should not deal with the tax issues affecting one sector in isolation from the impact that any changes to the tax system would have on all sectors. The results of this study, together with those of the Technical Committee on Business Taxation, indicate that a review of the tax treatment of this sector by federal and provincial governments is warranted in light of the significance of the tax issues and the changing competitive landscape.

The Report is organised under various sections dealing with the following topics:

- Key conclusions
- Recent Trends: Including a discussion of recent tax and non-tax trends affecting the competitiveness in this sector

- Assessing Competitiveness: These sections have been organised under the following headings:
 - Overview of Approach
 - Marginal Effective Tax Rate (METR) Analysis
 - The Making of Loans
 - Savings Vehicles
 - Specific Tax Issues
- Prudential Issues
- Conclusion
- Appendices

2. Key Conclusions

This section summarises the key conclusions coming out of this report. Support for these comments is contained elsewhere in the report.

- The tax system applying to the financial sector does not meet the basic design principles of any business tax: equity, efficiency and simplicity. This is particularly true in the provincial capital, premium and sales tax areas. Accordingly, the system is distortionary.
- Examples to support the above conclusion include the following:
 - The capital tax regime, including differential tax rates between FIs and non-FIs, the fact that Canada's major trading partners do not have capital taxes, the fact that the tax applies at the margin¹, the absolute level of capital taxes, etc.
 - The overlaying of provincial sales and premium taxes in the insurance sector – often there is tax on tax on tax – an equitable, efficient tax should tax transactions once.
 - The lack of federal/provincial harmonisation in sales taxes and capital taxes.
 - The application of targeted federal and provincial capital surtaxes to selected financial institutions.
 - See Section 8 for details on the above and other examples.
- The tax burden on the financial sector has increased significantly over the past decade (see Section 3).
- The tax burden on the financial sector is higher than on other sectors and has increased relative to the burden on other sectors (see Section 3).
- Recent trends in the financial sector (globalisation, decreased communication and computing costs, the Internet and disintermediation) will all increase competition in this sector in future years. This increased competition will result in more of the taxes on inputs likely falling back on less mobile factors of production and making Canadian providers of financial services less competitive than they are now (see Section 3).
- The application of many different taxes in different ways by different levels of government overly complicates the system (leading to increased compliance costs) and makes it very difficult to assess the competitive impact of specific taxes (see Section 4).

¹ The term “at the margin” in this paper refers to the fact that capital tax applies to all increases in capital that are included in the capital tax base. Accordingly, capital tax must be considered in any increase in capital used to support new loans, etc. There is no “cap” or maximum beyond which capital tax does not apply.

- The Canadian tax treatment of financial institutions does not leave them well positioned to deal with this increased competition. For both prudential and economic reasons it will be problematic for this sector to deal with high taxes on the various factors of production at a time of increasing competition (both domestically and internationally) and the resultant pressure on margins. From a tax perspective it will be increasingly difficult to compete in an integrated North American market when the tax burden is higher in Canada than in the U.S.
- The taxes that most affect the competitive position of financial service providers operating in Canada are capital taxes. Section 8 contains a discussion of a number of problems with these taxes. Both federal and provincial governments use capital taxes to a greater degree than other jurisdictions. Capital taxes affect the competitive position of regulated FIs versus both non-regulated FIs and non-residents (see Sections 5 and 6)
- Concerted effort should be given to either eliminating capital taxes, or if not eliminated:
 - eliminating the different capital tax rates;
 - harmonising federal/provincial tax base and investment allowances;
 - reducing reliance on capital taxes;
 - making the capital tax system operate like a true creditable minimum tax; or
 - developing mechanisms so that the capital tax does not operate "at the margin".²
- The other main area that is particularly problematic are the transaction taxes (specifically provincial sales and premium) that apply to the insurance sector (see Section 8). The level of these taxes, and their layering especially in Ontario, Quebec and Newfoundland, exacts a significant toll on this industry.
- With respect to corporate income tax rates, the least distortionary position would be to have one corporate rate in Canada (regardless of type of business); the best international competitive position would be to have a statutory tax rate slightly less than the U.S. to mitigate any transfer pricing pressure.
- The Canadian rules contain a few "tariffs" to protect Canadian providers of financial services. The main ones are as follows:
 - Canada levies a 25% non-resident withholding tax (reduced to 10% in many treaties) on interest paid or credited to non-resident lenders (see Section 8). This withholding tax is reduced by statute to NIL for arm's-length borrowings that do not require more than 25% principal repayments over a five-year term.
 - For life insurance companies, the *Insurance Companies Act (Canada)* requires that all foreign entities insuring lives of resident Canadians be federally licensed. Accordingly,

² Ibid

in most cases foreign life insurance companies who want to carry on business in Canada do so either through a Canadian branch or subsidiary. In this case they are subject, for all intents and purposes (other than some rules related to calculation of their taxable investment income under the Canadian Investment Fund ("CIF") rules) to the same taxation as Canadian residents.

- Premiums (with a few exceptions) paid to non-licensed (non-resident) P&C insurers are subject to a 10% Excise Tax on the premium. While this tax can be legitimately avoided by negotiating a reinsurance arrangement with a fronting Canadian insurer, most P&C companies wishing to carry on business in Canada do so either through a branch or subsidiary and are therefore subject to Canadian tax rules.
- The non-resident withholding tax levied on interest paid or credited to non-resident lenders is the only tax that Canada exacts from non-resident lenders who make loans to Canadian borrowers (there is no other Canadian income or capital tax on the loan and no Canadian GST, payroll tax or property tax on inputs used in making the loan). There are reasons (see Section 8) to consider eliminating or reducing this withholding tax on all arm's-length indebtedness. However, if such action were taken, other issues to consider would likely include:
 - reducing withholding taxes on a unilateral basis or on a bilateral basis (through treaty negotiation) to ensure Canadian lenders have equal access to foreign markets;
 - considering other changes (such as elimination of capital taxes) so that Canadian providers of financial services would be on a level playing field with non-residents.
- For Canadian FIs operating outside of Canada, there are several points to make:
 - Canadian companies can avoid/defer any Canadian tax on foreign active business operations by operating in the foreign jurisdiction through a foreign subsidiary.
 - Canada's basic exemption/credit system for taxing foreign source income has served Canada reasonably well and it would be counter-productive to tighten certain parts of these rules (such as the rules related to interaffiliate financing) as any change along these lines would simply make Canadian FIs less competitive. The taxation of foreign source income should be reviewed in a broader context since any changes would affect all corporations with foreign subsidiaries and not just FIs.
 - The Canadian capital tax system for FIs does not always properly eliminate capital tax imposed on capital used abroad. While many companies can avoid this result through the use of holding companies to separately own the Canadian and foreign financial business, certain Canadian FIs (such as mutual insurance companies and Schedule I banks) cannot.
- There are some instances where the objectives of prudential regulation are in conflict with tax planning considerations. These are summarised in Section 9.

3. Recent Trends in the Financial Sector

This section provides a brief overview of recent trends in the financial sector. It is important to identify these trends in order to understand the current impact of the tax system on the financial sector as well as to begin to predict how the current rules or any modifications to them could affect the competitiveness of this sector.

This section has been organised under two sub-headings:

- Recent Trends – Tax Issues
- Recent Trends – Non-Tax Issues

Recent Trends – Tax Issues

The most significant recent trends in the financial sector are as follows:

- The tax burden on the financial sector has increased significantly over the past decade – albeit from a low 1988 base;
- The tax burden on the financial sector is higher than on other sectors and has increased relative to the burden on other sectors.

This increased tax burden has resulted from base-broadening measures (mainly in income and capital taxes), new taxes, and tax rate increases (mainly capital and payroll taxes).

As a result of the above, the financial sector is increasingly contributing a larger share of government revenue.

Studies to support the above conclusions include the following:

- The 1997 Conference Board of Canada study, *Supporting Governments: Transfers from Financial Institutions to Governments*, includes the following data:
 - Total taxes paid by financial institutions to federal, provincial and municipal governments increased from approximately \$6 billion per annum during the 1991 to 1993 period to \$6.3 billion in 1994, \$7 billion in 1995, and more than \$8.3 billion in 1996. The absolute contribution has increased.
 - From 1991 to 1996, the financial sector's contribution to total government revenues (federal, provincial and municipal) increased from just over 2% to over 2.5%.
 - The comparable 1996 study indicated that the financial sector paid in 1995 about 20% of all *federal* corporate income and capital tax, while accounting for less than 6% of corporate profits. The 1997 study indicates that the financial sector's proportion of total corporate income taxes in 1996 was about 20% federally and 15% provincially.

- A recent study by Statistics Canada, *Financial and Taxation Statistics for Enterprises, 1992-1996*, indicates the financial sector as a whole accounted for 25% of all corporate taxes paid in 1994, (compared with 14% in 1988) and only 12.5% of total operating revenues. This doubled the financial sector's contribution vs. a 5% increase for the non-financial sector. This study also indicated that the financial sector's effective tax rate increased to 47.3% in 1994 from 39.4% in 1988. This study also noted that life and health insurers had the highest average growth rate of income and capital taxes over the period 1988-1994 of any industry.
- The Canadian Bankers' Association's 1996 *Earnings Report* indicates that Canadian banks' share of GDP amounts to approximately 2%, yet they pay 9% of all income and capital taxes collected from businesses in Canada.
- A recent study done for the Canadian Bankers' Association, *Comparative Total Taxation Study of the Canadian Banking Industry*, indicates that the overall costs of taxation are significantly higher for Canadian banks than for the other industries examined in Canada (credit unions and manufacturers) and compared with other jurisdictions (U.S. and U.K.).
- A study done for The Insurance Bureau of Canada, *Taxation of Property and Casualty Insurance in Canada, Comparisons Within the Financial Services Sector*, estimates that in 1995 the full Canadian value-added (defined as profits before depreciation plus wages plus the employer portion of payroll taxes) of the P&C industry was collected in taxes and that this tax burden of roughly 100% is more than three times the average tax burden paid by other financial industries in Canada. This significant burden is mainly due to transaction taxes (premium and sales taxes).
- A May 1995 study done by Paul Halpern and Jack Mintz, *Tax Incentives and Comparative Advantage*, found that the financial services sector was subjected to the highest marginal effective tax rate of all sectors examined (and almost 40% higher than those imposed on resource industries). As an aside, in spite of this high effective tax rate, the financial sector surprisingly boasted the highest results in all applicable measures of growth.

Accordingly, the consistent message in all of these studies is that not only has the burden on the financial services sector increased significantly over the last decade, it is likely now higher than on other sectors.

Tables 1 and 2 compare the income and capital tax rates between the FI and non-FI sector. These charts clearly indicate, especially in the capital tax area, the higher statutory burden on the FI sector.

Finally, a summary of recent tax changes to the FI sector has been compiled in Table 3. This Table demonstrates that there have been a number of changes to the taxation of the FI sector which has resulted in the burden on the FI sector increasing substantially over the last decade.

Recent Trends – Non-tax Issues

Recent non-tax trends in the financial sector are summarised under the following headings:

1. Globalisation
2. Technology
3. Institutional Change
4. Disintermediation

The key conclusions from a review of these recent trends are:

- It is becoming easier for Canadian companies to operate abroad;
- It is becoming easier for non-residents to operate in Canada and in a manner that avoids/minimises Canadian taxes;
- The effect of the above is that competition will likely continue to increase in the financial service sector and, while increased competition is beneficial, it is problematic for any domestic providers of financial services in Canada if they operate under a regime where there are disproportionately high taxes on all factors of production and if the tax burden is comprised of non-profit related taxes that are increasing at a time when there is pressure on margins due to increased competition. This trend also raises prudential concerns.

Globalisation

As all businesses increasingly become global – for a number of reasons, including the growth in global trade (partly as a result of trade liberalisation initiatives such as NAFTA) – and the world evolves to a single market for goods, services, capital and information, there is a global need for financial products to serve this market. In response to these global demands, the financial sector has developed new, innovative financial instruments (such as derivatives) to meet the global demand to finance trade and investment, and reconcile the often different requirements of borrowers and investors. In addition, to meet global demand, the financial sector must now organise itself to meet the demands of investors 24 hours a day. With different corporate income tax rates between countries and difficulty in precisely determining where income is earned, this globalisation inevitably puts pressure on the tax planners to find a "home" for this income that bears the least tax.

There are numerous examples of Canadian financial service providers expanding abroad and of non-residents expanding into Canada as a result of this increased globalisation.

Examples of Canadians expanding abroad include the following:

- Newcourt Capital acquiring AT&T Capital in a \$1.6 billion deal;
- TD acquiring Waterhouse Investor Services for \$935 million;

- Manulife operating in China;
- CIBC acquiring Oppenheimer & Co., a U.S. brokerage business, for approximately one-half billion dollars;
- The major Schedule I banks continuing to expand into Latin America, South America, Asia and Europe.

Similarly, there are a number of examples of non-residents expanding into Canada. While many of these entries into Canada are embryonic at this stage, they are likely indicative of future trends. These include the following:

- Proposed changes to allow foreign banks to operate as branches in Canada.
- Wells Fargo, a pioneer in long-distance telephone lending to small businesses in the U.S., has received OSFI approval to extend its service into Canada without either a physical presence in Canada or the need to submit to Canadian banking regulations.
- Dutch insurance and banking company ING Groep NV launched ING Direct, a Toronto-based electronic bank that is going after business without the expense of setting up a physical branch network.
- U.S. credit card issuer MBNA Corp.'s entry into the Canadian marketplace (MBNA Corp. is the second-biggest player in credit cards in the United States).
- Comerica (the 26th largest bank in the U.S.) has recently applied to establish a Schedule II bank in Canada as part of its strategy of operating off a North American platform by having operations in Mexico and Canada, as well as in the U.S.
- Fidelity Investments' and GE Capital's recent expansions on the Canadian mutual fund market and asset-based financing market respectively.

What is noteworthy about these recent investments in the Canadian marketplace by non-residents is that they do not rely to the same extent as their domestic counterparts on inputs which are heavily taxed in Canada (such as people or bricks and mortar).

Technology

Advances in technology have led to steep decreases in costs of communication and computing which have reinforced and supported the globalisation of the financial services market. This has a number of impacts on the financial service sector, including the following:

- The development of ATMs, and telephone and electronic banking has, and will continue to have, a significant effect on the institutional structure of the domestic industry, likely leading to fewer branches and more virtual, remote 24-hour banking centres like mbanx (Bank of Montreal) and Citizens Bank (Vancouver City Savings Credit Union).

- Activities that need only a screen, telephone and modem can be located anywhere, and with the increased development of the Internet, non-residents will increasingly have unparalleled access to the Canadian marketplace. Locational decisions will be influenced by pools of skilled labour and favourable cost (including tax) structures.

Institutional Change

Historically, financial services were provided by four pillars in Canada (banks, trust companies, insurance companies and investment dealers). Through deregulation and the changing nature of the financial services market, these lines have become blurred. This has led to some industry consolidation both within and across traditional industry lines. Recent examples are the purchase of London Life by Great West Life for \$2.9 billion, the acquisition of National Trust by Scotia Bank for \$1.25 billion in 1997, and the recently announced merger of the Bank of Montreal with the Royal Bank which is awaiting regulatory approval.¹ Several major Canadian mutual life insurers have also announced plans to consider demutualisation to give them access to capital markets.

Disintermediation

Intermediation – providing for the efficient transfer of capital from savers and investors to borrowers and users of capital – is a significant function carried out by the financial services sector. As the market has become more sophisticated, there are numerous examples of how this is changing, and while the basic functions provided by financial institutions may not change, how institutions organise themselves to deliver these is. A main example of this is "disintermediation" – borrowers in need of funds are bypassing FIs and directly accessing capital markets and investors (through mutual funds and securitisations). The investors in these mutual funds, income and royalty trusts or securitisations could be individual investors or, alternatively, retirement plans such as RRSPs or RPPs. Given the demographic profile in Canada, the amount of funds available (whether through retirement plans or otherwise) should significantly increase in the next several decades, and financial institutions will likely find it tougher to compete with these new providers of financial services for the following reasons:

- Banks and other domestic lenders will incur capital tax on any loans made that are supported by their capital base; loans made through securitisations, mutual fund trusts, etc., will not incur capital tax.
- The intermediation margin earned by the bank will be subject to full corporate tax rates (and subsequently personal tax on distribution); in many cases, the cash flows through the securitisation process will only be subject to personal tax (either currently or deferred for many years if the investments are held through retirement plans).

Accordingly, the tax rules will make it more difficult for the financial sector to compete against these emerging, non-traditional financial service providers. As an aside, it should be noted that

¹ Also the proposed CIBC/TD merger announced after this report was completed.

there is a strong incentive for businesses in need of funds to participate in the securitisations as well, as they will often free up cash flow, get assets off their balance sheet and thus reduce capital tax, and through leverage of the business significantly reduce corporate taxes. These securitisations of cash flows are being extended to a variety of different instruments, including leasing of equipment (bringing together companies who want to lease assets and investors who want to tap into these cash flows), investors investing directly in resource properties (royalty trusts), etc.

Conclusion

This review of tax and non-tax trends in the financial services sector indicates that the tax burden has increased in recent years on this sector in Canada and that this burden does not leave FIs well-positioned to deal with the increased competition that will inevitably result as a result of recent non-tax trends – competition that will come from non-FIs and non-residents who are not subject to Canadian tax rules. It will be problematic (for both prudential and economic reasons) to continue to live with high taxes on the various factors of production at a time of increasing competition (both domestically and internationally) and the resultant pressure on margins.

Table 1

Combined Federal and Provincial Statutory Corporate Income Tax Rates for Taxation Years Ending December 31, 1997⁴

| | All large active businesses (including financial institutions) other than manufacturers | Manufacturers |
|----------------------|--|----------------------|
| | % | % |
| Alberta | 44.62 | 36.62 |
| British Columbia | 45.62 | 38.62 |
| Manitoba | 46.12 | 39.12 |
| New Brunswick | 46.12 | 39.12 |
| Newfoundland | 43.12 | 27.12 |
| Nova Scotia | 45.12 | 38.12 |
| Ontario | 44.62 | 35.62 |
| Prince Edward Island | 44.62 | 29.62 |
| Quebec | 38.27 | 31.27 |
| Saskatchewan | 46.12 | 32.12 |

⁴ Assuming no small business deduction.

Table 2

Canadian Capital Tax Rates 1997/98

| | Financial institutions | Other corporations |
|--|---------------------------|-----------------------|
| | % | % |
| Federal | | |
| Large Corporations Tax ¹ | 0.225 ³ | 0.225 |
| Part VI Tax ² | 1.250 | --- |
| Additional Temporary Part VI Tax on: | | |
| - Life insurers | graduated | --- |
| - Deposit-taking institutions | 0.150 | --- |
| Provincial⁴ | | |
| Alberta | 2.0 | --- |
| British Columbia | 1.0/3.0 | 0.3 |
| Manitoba | 3.0 | 0.3/0.5 ⁸ |
| New Brunswick | 3.0 | 0.3 |
| Newfoundland | 4.0 | --- |
| Nova Scotia | 3.0 | 0.25 ⁸ |
| Ontario | 0.6/0.72/0.9 | 0.3 |
| - Bank surtax and other deposit-taking institutions surtax | 0.09 | --- |
| - Life insurers | 1.25 | --- |
| Prince Edward Island | 3.0 | --- |
| Quebec ⁵ | 1.318 ⁶ | 0.659 |
| - Life insurers | 1.25 ⁷ | --- |
| Saskatchewan | 3.25 | 0.60 |

¹ Federal surtax is creditable against LCT

² Part I income tax is creditable against Part VI tax.

³ Base includes tangible property

⁴ "Financial institutions" generally includes banks, trust and loan companies.

⁵ Includes Anti-Poverty Fund surtax.

⁶ Plus 0.25% compensatory tax.

⁷ Plus 0.35% compensatory tax on insurance premiums.

⁸ Rate applies to insurance corporations.

Table 3**Recent Changes that have Increased the Tax Burden on the FI Sector**

In reviewing the tax burden issue, it is useful to briefly review the recent tax changes that have caused the burden on this sector to increase:

- During the 1980's, there was a sense that the financial sector was not paying its fair share. This was caused by several factors:
 - The tax rules encouraged financial institutions to enter into various after-tax financing and leasing arrangements to provide lower borrowing costs to customers. These arrangements either converted taxable income of FIs into tax-free dividends or provided shelter for other taxable income;
 - In the insurance sector many companies reported little or no taxable income despite significant financial income.

Some of the more significant tax changes over the last decade targeting financial institutions are set out below:

1986

- Part VI capital tax imposed on financial institutions (other than life insurers) at 1% rate for a two-year "temporary period".

1988

- Part VI tax became permanent but modified so that it acted as a minimum tax rather than additional tax; rate increased to 1.25%.
- Investment reserves of trust and loan companies, credit unions, deposit insurance companies and insurance companies restricted.
- Loan loss reserves of banks (except for sovereign loans to foreign countries in financial difficulty) reduced.
- Reduced deduction for policy reserves of insurance companies.
- Partial discounting of unpaid claims reserves required of property and casualty insurers.
- Investment income tax at 15% applied to investment income accruing to fund insurance liabilities of life insurance companies. (These rules were substantially revised in 1990.)
- Part VI.1 tax at 25%, 40% or 66-2/3% rate imposed on preferred share dividends qualifying for inter-corporate dividend deduction. Recipient specified financial institution liable for 10% tax where corporate dividend payor does not pay at least 40% tax.
- Corporations acquiring new term preferred shares no longer able to utilise the de minimis exemption in respect of listed shares.
- Short-term and collateralised preferred share rules denying inter-corporate dividend deduction.

1989

- Large corporation tax ("LCT") introduced at 0.175% of taxable capital employed in Canada in excess of \$10 million.
- In addition to LCT on their total capital, only financial institutions are subject to LCT in respect of capital used to finance their real property and tangible personal property.
- Capital cost allowance restrictions imposed on lessors of depreciable property having a value exceeding \$25,000, unless the principal business is leasing.
- Dividend rental rules introduced to deny inter-corporate dividend deduction.

1990

- Part VI capital tax extended to apply to life insurance corporations and certain holding companies of related financial institutions at 1.25% rate. The intention of this tax was to operate as a minimum tax.

1991

- Introduction of GST; since most financial services exempt, recovery of GST input credits significantly restricted.
- LCT rate increased to 0.2%.
- Quebec introduced a 9% retail sales tax on group life and health insurance premiums and a 5% sales tax on auto premiums.

1992

- Additional graduated "temporary" capital tax imposed upon life insurance corporations; increasing total Part VI tax rate to 1.5%.

1993

- Ontario and Quebec extended retail sales taxes to insurance premiums (other than premiums on individual life and health policies) and to contributions to employee benefit plans that provide benefits that could be insured.
- Ontario introduced an 8% retail sales tax on group life and health insurance premiums and a 5% sales tax on auto premiums.

1994

- Full discounting introduced for current deduction of unpaid claim reserves for non-life insurance corporations. (This brought tax treatment in line with accounting and actuarial reserves.)
- Profit and losses of all securities held by financial institutions in the ordinary course of their business required to be treated on income account. Further, most share investments to be marked to market; thus requiring that the unrealised appreciation or depreciation in their value must be recognised each taxation year. For specified debt obligations gains and losses amortized over period to maturity rather than reflected in full in the year of disposition.

1995

- Additional "temporary" non-creditable 0.15% Part VI capital tax imposed upon large deposit-taking financial institutions (other than life insurance corporations). The tax was initially to expire on October 31, 1996, but has since been extended three times and will now run until at least October 31, 1999.
- LCT rate increased to 0.225% for all corporations (not just FIs).
- Canadian foreign affiliate rules expanded to cover loans and insurance provided to Canadian residents by offshore affiliates of Canadian FIs.

1996

- Revised rules for determining tax-deductible policy reserves of life and health insurers, generally increasing taxable income.
 - Proposed broadening of the Canadian Investment Fund base of both multi-national and non-resident branch insurers to eliminate flaws in the calculation of income from a Canadian insurance business.
 - Ontario introduced temporary surcharge on banks (10% of Ontario capital tax liability in excess of \$400 million).
-

4. Assessing Competitiveness – Overview of Approach

Difficulties in Assessing Competitiveness

There are a number of significant problems in trying to develop a model to assess competitiveness in the financial services sector:

- First, there are a number of different financial service providers, including banks, trust companies, life and P&C insurance companies, investment dealers, credit unions, mutual funds, pension and other retirement funds, unregulated entities and a wide range of non-resident entities.
- Second, there are many different types of taxes applying to this sector, the taxes are not applied consistently, they are applied by different levels of government, and there are a number of interactions between the taxes. For example:
 - Both federal and provincial governments levy income taxes, capital taxes and sales taxes; the application of these taxes (especially sales and capital taxes) is not harmonised either between the federal and provincial governments or between provincial governments.
 - Table 4 below sets out, in general terms, the types of taxes applied to this sector:

Table 4

| | Federal | Provincial | Municipal |
|-----------------------|------------------|------------------|-----------|
| Income Tax | X ⁽¹⁾ | X ⁽¹⁾ | |
| Investment Income Tax | X ⁽²⁾ | | |
| Capital Taxes | X ⁽³⁾ | X ⁽⁴⁾ | |
| Premium Taxes | | X ⁽⁵⁾ | |
| Sales Taxes | X | X | |
| Payroll Taxes | X | X | |
| Property Taxes | | | X |

Notes:

1. Worldwide income (with foreign tax credits) except for life insurance companies which only includes Canadian source income.
2. Tax only applies to income accruing on certain policies issued by life insurance companies.
3. Federal Part I income taxes and surtaxes are creditable against federal (Part VI and LCT) capital taxes respectively except temporary tax on capital.
4. Provincial capital taxes are deductible for federal and provincial income tax purposes (subject to certain limits).
5. Premium taxes replace capital taxes for insurance companies in all provinces. However, Manitoba, Ontario (1993), Quebec (1996) and Nova Scotia (1997) now also apply both premium and capital taxes.

- Table 5 summarises a number of significant differences in the application of these taxes on the financial sector in general and as between the various segments in the FI sector.

- Third, any analysis that relies on a review of actual tax data (payments, etc.) is an historical perspective; as market forces change, we need to assess how the tax system will affect competitiveness in the future, not how it has operated in the past.
- Fourth, most models involve assumptions including how a business is carried on, which taxes to consider and who bears the impact of any taxes levied – the tax incidence issue: Are the taxes passed forward onto consumers or back onto labour in a manner that does not impact competitiveness, or do they impact on the costs of the entity, affect the return to capital and thus the competitiveness of the entity?
- Finally, regardless of what the stated intent of tax legislation may be, entities engage in tax planning to avoid or minimise their tax obligations – it is not possible to model this behaviour.

Assessing Competitiveness – Approach Taken

In light of the above problems, the approach in this study has been as follows:

- First, to review other studies which have endeavoured to assess the impact of the tax system on the financial services sector. These include the studies noted in Section 3 dealing with "Recent Trends – Tax Issues". They include:
 - *Supporting Governments: Transfers from Financial Institutions to Governments* (Conference Board of Canada 1997);
 - *Financial and Taxation Statistics for Enterprises, 1992-1996* (Statistics Canada);
 - *1996 Earnings Report and Comparative Total Taxation Study of the Canadian Banking Industry* (Canadian Bankers' Association);
 - *Taxation of Property and Casualty Insurance in Canada, Comparisons Within the Financial Services Sector* (Insurance Bureau of Canada);
 - *Tax Incentives and Comparative Advantage* (Halpern & Mintz)
- Second (see Section 6), to perform some static analysis of the impact of the tax system on the provision of loans made by:
 - Canadian regulated banks vs non-regulated entities; and
 - Canadian regulated banks compared with banks in the U.K. and U.S.

This analysis also looks at the impact of the capital tax system on the cost of making loans.

- Third (see Section 7), to compare the application of the tax system on various savings vehicles: bank products, deferred annuities and exempt life insurance policies.

- Fourth (see Section 8), to provide a descriptive analysis of some of the key concerns raised with respect to the operation of the tax system as it relates to FIs.
- And finally (see Section 5), to attempt to model the impact of the tax system on the cost of providing loans by a Canadian bank, a credit union, an unregulated entity and a U.S. bank using a marginal effective tax rate on production costs (METR on production costs) approach that is a modification of a similar approach applied to other sectors by the Department of Finance, OECD, and others.

The results of all of this analysis support the general conclusions noted earlier that the tax burden on the financial services sector is high, the tax burden has been increasing, and that this sector is increasingly being put at a competitive disadvantage.

Table 5
Special Tax Provisions Applicable to FI Sector

| | Banks | Trust Companies | Credit Unions | Life Insurers | P&C Insurance | Investment Dealers |
|---|--|---|--|---|---|--|
| Income Tax | | | | | | |
| Federal and Provincial | <ul style="list-style-type: none"> • Loan loss deductions • Different provincial allocation formula • Mark-to-market rules • LDC debt reserve available only to banks | <ul style="list-style-type: none"> • Different provincial allocation formula • Mark to market rules | <ul style="list-style-type: none"> • Small business deduction • Additional 16% tax credit based on taxable income limitation • Dividends paid treated as interest • Mark to market rules | <ul style="list-style-type: none"> • Exclude income from business conducted outside Canada • Different provincial allocation formula • Investment income tax • Mark to market rules | <ul style="list-style-type: none"> • Taxed like non-FIs • Different provincial allocation formula • Special rules for reserves • Mark to market rules | <ul style="list-style-type: none"> • Taxed like non-FIs • Mark to market rules |
| Capital Taxes – Federal⁽¹⁾ | | | | | | |
| LCT | <ul style="list-style-type: none"> • No special provisions other than: <ul style="list-style-type: none"> - inclusion of tangible property in base - only long-term debt included - investment allowance restricted to investment in related FIs - taxable capital allocation based on Canadian assets | <ul style="list-style-type: none"> • Same as banks | <ul style="list-style-type: none"> • Same as banks (except largely exempt due to size) | <ul style="list-style-type: none"> • Same as banks except taxable capital allocation based on Canadian reserves | <ul style="list-style-type: none"> • Same as banks except taxable allocation based on Canadian premiums | <ul style="list-style-type: none"> • Same as banks |
| Part VI | √ | √ | <ul style="list-style-type: none"> • Not applicable due to size | √ | <ul style="list-style-type: none"> • Not applicable | <ul style="list-style-type: none"> • Not applicable |
| Temporary Additional Part VI on Life Insurers | Not applicable | Not applicable | Not applicable | √ | Not applicable | Not applicable |

Notes:

⁽¹⁾ Different capital tax bases for federal LCT and Part VI purposes and different bases for federal and provincial purposes.

| Special Tax Provisions Applicable to FI Sector (cont'd) | | | | | | |
|---|---|---|--|--|--|---|
| Banks | Trust Companies | Credit Unions | Life Insurers | P&C Insurance | Investment Dealers | |
| Temporary Surtax on Part VI | ✓ | ✓ | • Not applicable due to size | Not applicable | Not applicable | Not applicable |
| Capital Taxes – Provincial ⁽¹⁾ | | | | | | |
| • Special surtax on capital in Ontario | • Same as banks | • Compensatory taxes in lieu of QST rebates in Quebec | • Replaced by premium taxes in all provinces except Manitoba and Nova Scotia also levy capital taxes | • Replaced by premium taxes in all provinces except Manitoba and Nova Scotia also levy capital taxes | • Compensatory taxes in lieu of QST rebates in Quebec | |
| • Compensatory taxes in lieu of QST rebates in Quebec | | | • Special tax on life insurer capital in Ontario and Quebec | • Compensatory taxes in lieu of QST rebates in Quebec | | |
| | | | • Compensatory taxes in lieu of QST rebates in Quebec | | | |
| Sales Taxes | | | | | | |
| Federal | • No special rules; minimal input credits available as financial services exempt for GST purposes | • No special rules; minimal input credits available as financial services exempt for GST purposes | • No special rules; minimal input credits available as financial services exempt for GST purposes | • No special rules; minimal input credits available as financial services exempt for GST purposes | • No special rules; minimal input credits available as financial services exempt for GST purposes | • No special rules; minimal input credits available as financial services exempt for GST purposes |
| Provincial | • Large corporations denied input credits in Quebec | • Large corporations denied input credits in Quebec | • Large corporations denied input credits in Quebec | • Large corporations denied input credits in Quebec • Sales Taxes on some insurance premium in Ontario and Quebec | • Large corporations denied input credits in Quebec • Sales Taxes on some insurance premium in Ontario, Quebec and Newfoundland | • Large corporations denied input credits in Quebec |

Notes:

⁽¹⁾ Different capital tax bases for federal LCT and Part VI purposes and different bases for federal and provincial purposes.

5. Assessing Competitiveness – Marginal Effective Tax Rate (METR) Analysis

Analysis of the Marginal Effective Tax Rate Approach to the Financial Sector

Description of Approach

The approach taken in this section to determine the impact of the tax system on the "competitiveness" of the financial services sector is a modification of a similar approach that has been applied to other sectors by the Department of Finance, the OECD and others. The approach was developed by Jack Mintz, Ken McKenzie and Kim Scharf.¹

Analysts have traditionally been concerned with the implications of public policy, including taxation for "competitiveness"². Yet the meaning of the term "competitiveness" is not always well defined. A natural way to think about "competitiveness" is as the "cost of doing business". Thus, the extent to which the tax system affects a firm's, or an industry's, or a country's "cost of doing business" is of interest. More precisely, we are interested in measuring the extent to which the business tax regime might impinge upon the marginal cost of producing an incremental unit of a good or service.

Why are we interested in marginal costs? The marginal cost of production is a key determinant of the level of goods and services produced. Businesses maximise profits by producing goods and services up to the point that the marginal revenue which arises from producing one more unit of a good or service is just equal to the marginal cost associated with producing that unit. Anything that increases marginal costs will thus cause output to decline. Taxes increase the marginal cost of production by increasing the cost of the various inputs used to produce a good or service. Of particular concern for our purposes is the extent to which the tax regime may result in an "uneven playing field", impinging upon marginal costs differentially across producers within a market, across producers from different jurisdictions, and across industries.

To quantify the impact of the tax system on the "cost of doing business", the marginal effective tax rate on production costs (METR on production costs) is calculated. The METR on production costs measures the extent to which taxes levied on firm inputs, such as capital, labour, materials, etc., contribute to the cost of producing one more unit of a good or service. It aggregates the various taxes levied on these inputs into a summary measure of the extent to which the tax regime adds to the "cost of doing business". The METR on production costs literally tells us the percentage increase in the marginal cost of producing one more unit of a good or service caused by the tax system.

¹ McKenzie, K.J., J.M. Mintz and K.A. Scharf (1997), "Measuring Effective Tax Rates in the Presence of Multiple Inputs: A Production Based Approach", *International Tax and Public Finance*, Vol. 4, No. 3, 1997 pp. 337-359

² See, for example, Michael Porter (1990).

Moreover, in order to maximise profits, a business will produce goods and services up to the point where marginal revenue is equal to marginal cost. In the presence of taxes, a business will produce goods or services up to the point where after-tax marginal revenues are just equal to after-tax marginal costs. This allows us to express the METR on the good or service provided by the business – the effective rate of tax levied on the before-tax rate of return required by the businesses. Both of these types of METRs are computed using this methodology.

To apply this approach to the financial services sector we must be precise about the type of products which are "produced" by the financial sector. This is problematic, as the financial services sector is very diverse, with banks, trust companies, credit unions, life insurers, P&C insurers, etc., providing a wide variety of goods and services. The approach we take is to think of financial institutions as providing a service that we call "financial intermediation".

Consider deposit-taking and credit-granting institutions like banks, trust companies, credit unions, etc. These institutions allow depositors to pool and spread their risks by holding a portfolio of loans. Depositors could lend money directly to individuals and businesses but they often choose to do so indirectly through the deposit-taking and credit-granting institutions. Why? Because these institutions lower the cost of "intermediating" and managing loans by screening and assessing new loan applicants, monitoring and administering existing loans, etc. This service is valuable because it is often costly for individuals (i.e. depositors) to do it on their own. (Note, however, the discussion on disintermediation in Section 3.) To produce this intermediation, these institutions combine labour, physical capital, materials, etc., according to some "intermediation technology". If we presume, as suggested above, that deposit-taking and credit-granting institutions grant credit up to the point where the marginal revenue from granting one more dollar of credit is just equal to the marginal cost, which includes the marginal cost of intermediating the loan, we can then calculate the METR on production costs which tells us the impact that the tax system has on these marginal costs and the METR on providing the loan. By comparing these METRs across different types of credit-granting institutions, we can determine the extent to which the tax system differentially impacts upon the "cost of doing business", or generates a non-level "playing field".

The approach outlined above is conceptually appealing, and robust enough to accommodate a wide range of activities undertaken by financial institutions and incorporate most of the taxes levied on these institutions. Moreover, the approach has some advantages over the typical approach to analysing the impact of the tax system on financial institutions. The typical methodology, followed, for example, in studies done for the Canadian Bankers' Association noted in Section 4, falls under the general heading of the "project analysis approach".

One way of employing the project analysis approach is to determine the impact of taxes on competitiveness by measuring the rate of return to capital for a typical project in a particular industry. For example, the internal rate of return gross of taxes is determined by assuming that the firm pays no taxes. The internal rate of return net of taxes is then determined assuming that the firm pays the corporate income tax, payroll taxes, excise taxes, capital taxes, etc. An "effective tax rate" is then calculated as the difference between the gross and net internal rates of return, divided by the gross of tax internal rate of return. Alternatively, total taxes levied on the firm may simply be expressed as a percentage of income gross of taxes.

The project analysis approach has two flaws which can make it problematic for policy analysis:

- First, it presumes that all taxes fall on shareholders, as firm revenues and costs are held constant both before and after taxes. Thus, all taxes, whether they are levied on the return to capital (such as the corporate income tax) or on labour (such as payroll taxes) are viewed as reducing the return to capital paid to owners of the firm. This is problematic because it tends to overstate the effective tax rate for non-capital-intensive firms. As the proportion of costs going to capital declines, effective tax rates measured in this way begin to approach 100%. Thus, less capital-intensive projects will facebe reported as facing higher effective tax rates than more capital-intensive projects, all else being equal.
- The second problem with the traditional project analysis approach concerns the presence of *inframarginal* returns (returns in excess of that required to just attract investment). Typically, the higher the internal rate of return generated by the project, the higher the effective tax rate. Thus, effective tax rates on two projects with different internal rates of return may well differ, even though for marginal projects the effective tax rates would be identical. This makes comparisons among producers, sectors and jurisdictions difficult.

The METR approach employed in this study overcomes both of these difficulties. The latter problem is overcome because the methodology explicitly focuses on *marginal* decisions. The former difficulty is overcome by making specific assumptions about the economic "incidence" of taxes levied on firm inputs, in accordance with information available from the economic literature.

As indicated above, the METR approach can accommodate most types of taxes facing financial institutions, including corporate income taxes (including most of the provisions contained therein with respect of financial institutions), federal and provincial capital taxes (such as federal LCT and capital tax on large financial institutions), provincial capital taxes, etc.), payroll taxes, property taxes, etc.

One of the shortcomings of the approach is that it is not able to explicitly account for much of the innovative and creative "tax planning" that financial and non-financial institutions may engage in. Indeed, it shares this shortcoming with the project analysis approach. Any methodology which seeks to quantify and compare the impact of the tax system on competitiveness must inevitably make a number of simplifying assumptions, and the METR approach is no different. As such, it may well fail to incorporate important aspects of the tax system which cannot readily be modelled within a quantifiable framework. As such, it is very important to supplement and complement the analysis with other approaches (see Sections 6 and 7) and subjective, non-quantifiable analysis of a more descriptive nature (see Section 8).

Results

The METR approach described above was applied to calculate METRs on costs and on loans issued by financial and non-financial institutions and to institutions in Canada and the U.S. This analysis was performed by Ken McKenzie of the Department of Economics, University of

Calgary. A paper describing the methodology used and the results of the modelling is attached as Appendix A.

Table 6 summarises the METRs on both marginal loan costs and loans for Canadian financial institutions, including large banks, credit unions, and non-financial lending institutions. Calculations are also presented for banks operating in the U.S. Since large corporations pay the greater of the LCT and federal corporate surtax and the greater of the Part VI and the federal corporate income tax, for large Canadian institutions (banks and non-financials) calculations are presented for two cases: the case where the institution is presumed to pay the LCT and Part VI, and the case where it is not.

Looking first at banks in Canada for the case where LCT and Part VI are paid, note that the METR on the marginal cost of producing loans is 31%. This means that the various taxes levied on labour and capital employed in the banking sector increase the cost of producing a marginal loan by 31%. A large part of the METR on marginal loan costs arises because of federal and provincial capital taxes. Eliminating all capital taxes lowers the METR on marginal costs to 22%. The METR on loans issued by large banks is 78%. As discussed in Appendix A, this is the effective rate of tax levied on the before-tax rate of return required by the financial markets suggested by the tax system in Canada. Capital taxes play a major role here as well, as the METR on loans drops to 64% if capital taxes are eliminated from the calculations. If banks are assumed not to pay the LCT or Part VI (but still pay provincial capital taxes), the METR on costs drops to 26% and the METR on loans drops to 72%.

Turning now to Canadian credit unions, it is evident that they face much lower METRs on both loans and loan costs. The METR on the marginal cost of producing a loan by a Canadian credit union is 19%, twelve percentage points lower than a federal capital tax paying Canadian bank. Moreover, the overall METR on marginal loans made by credit unions is 62%. These calculations suggest that the Canadian tax system provides a competitive advantage to credit unions over banks. The reason for the lower METRs is two-fold. First, credit unions in Canada face substantially lower corporate income tax rates at both the federal and provincial level. Providing that certain conditions regarding size of taxable income relative to the amount advanced to its members are satisfied, credit unions face a federal tax rate sixteen percentage points lower than banks. Similar reductions occur at the provincial level, ranging from about three to five percentage points. Many credit unions in Canada satisfy these requirements and, therefore, the reduced rates were used in the calculations for Table 6. The second reason that the METRs on Canadian credit unions are lower than banks is that, by virtue of the size of most credit unions, they do not face either the federal LCT or Part VI tax. Some provincial capital taxes are, however, levied on credit unions. If provincial capital taxes were eliminated, the METR on costs for credit unions would drop to 14% and the METR on loans would drop to 50%.

Non-financial institutions in Canada often provide credit to customers to finance purchases of goods and services. The obvious example is loans made for car purchases. The METRs on marginal costs and loans made by these institutions are reported in the third row of Table 6. The METR on the marginal cost of producing a loan in the case of an LCT-paying non-financial institution is 25%, while the METR on loans is 69%. Thus, we see that the tax system in Canada

impinges upon the competitiveness of the loan activities of non-financial institutions to a lesser degree than it does for Canadian banks, but a slightly greater extent than credit unions. The reason for this is that, while it is presumed in the calculations that the non-financials face the same statutory corporate tax rate as banks, which is higher than credit unions, the non-financials are presumed to face the LCT; however, the Part VI tax is not levied on these institutions. Moreover, while some provincial capital taxes apply to non-financials, the rates are somewhat lower than for financial institutions (see Table 2). For non-LCT paying non-financials, the METR on costs drops to 23% and the METR on loans to 67%. If all capital taxes were eliminated, the METR on costs would be 21% and the METR on loans 64%.

It is interesting for comparative purposes to apply the model to the taxation of banking institutions in the U.S. The last row of Table 6 presents the relevant calculations for large banks in the U.S. The METR on costs facing U.S. banks is 25% and the METR on loans is 67%. Thus, U.S. banks face METRs slightly higher than Canadian credit unions, comparable to Canadian LCT-paying non-financials, and substantially lower than LCT/Part VI-paying Canadian banks. There are some aspects of the taxation of banks in the U.S. that put them at a competitive disadvantage to Canadian banks and some that put them at a competitive advantage; from Table 6 it is evident that, on balance, the latter outweigh the former. The U.S. banks modelled in Table 6 actually face slightly higher total corporate income tax rates than the Canadian banks. This is due to the higher federal rate in the U.S. and the fact that New York City levies a local income tax on top of the federal and state income tax (see Appendix A for assumptions used in the model). Thus, although state income tax rates tend to be lower than provincial income tax rates, overall the income tax rate facing banks is slightly higher in the U.S. Another aspect of the taxation of banking in the U.S. that puts them at a disadvantage relative to Canadian banks is the treatment of loan losses. In Canada, 90% of reserves for loan losses may be deducted immediately and 10% must be delayed until the losses are realised. The Canadian Bankers' Association estimates that the average delay is about two years. This two-year delay lowers the present value of the loan loss deduction. In the U.S., all loan losses are delayed until realisation; the same two-year delay is assumed in the calculations. This lowers the present value of loan loss deductions in the U.S. relative to Canada. However, despite these advantages, Canadian banks clearly face some disadvantages relative to their U.S. counterparts. Of vital importance again is the presence of capital taxes in Canada. In the U.S., no federal capital tax is imposed on banks. As discussed above, some Canadian banks face both the LCT and Part VI at the federal level. Also, there is no capital tax levied in California or Illinois and only a small capital tax in New York in the model used in Appendix A. On balance, the tax disadvantage faced by Canadian banks due to the absence of capital taxes in the U.S. outweighs any benefits on the income tax side, with the net effect that Canadian banks are at a tax-induced competitive disadvantage relative to their U.S. counterparts. Note, however, that for non-LCT/Part VI-paying banks in Canada, the METR on costs and the METR on loans are much closer to the U.S.

In summary:

- Canadian banks paying the LCT and Part VI face much higher METRs than credit unions or non-financials. This places them at a tax-induced competitive disadvantage in the domestic marketplace. While banks may have many other competitive advantages over credit unions and non-financials, these results suggest that these are at least partially offset by the tax-

induced competitive disadvantages. There is clearly not a level playing field in the tax treatment of lending activity in Canada.

- Canadian banks also face a tax-induced competitive disadvantage relative to banks operating in the U.S. However, much of the tax-induced competitive disadvantage faced by Canadian banks disappears when they do not pay the LCT and Part VI and provincial capital taxes. It would appear to be the presence of capital taxes levied on banks more than anything else that places them at a tax-induced competitive disadvantage.

Table 6

**Marginal Effective Tax Rates
percent**

| | METR on Costs | | | METR on Loans | | |
|----------------|------------------------------------|----------------------|---------------------|------------------------------------|----------------------|------------------------|
| | All Capital Taxes Applicable | No LCT or Part VI | No Capital Taxes | All Capital Taxes Applicable | No LCT or Part VI | No Capital Taxes |
| Banks | 31 | 26 | 22 | 78 | 72 | 64 |
| Credit Unions | 19 | N/A | 14 | 62 | N/A | 50 |
| Non-Financials | 25 | 23 | 21 | 69 | 67 | 64 |
| U.S. Banks | 25 | N/A | N/A | 67 | N/A | N/A |

6. Assessing Competitiveness – The Making of Loans

In this section, we have employed a static analysis type of approach (as compared to the METR approach in Section 5) to compare the tax impacts arising on the making of loans in several situations:

- **Regulated vs Non-Regulated:** The first example compares a Canadian bank with an unregulated FI (see Table 7). This Table indicates that, due to capital taxes, the bank would have to earn significantly more to earn the same after-tax return as the non-regulated domestic FI.
- **Resident vs Non-Resident:** The second example (see Table 8) compares the return a Canadian bank would earn on a loan compared with a U.K. or U.S. bank, each operating in its own jurisdiction. Again, mainly due to capital taxes, the Canadian bank will earn a lower return on capital.
- **Impact of Capital Tax on Cost of Making a Loan:** The final example (see Table 9) illustrates the impact of the capital tax system on FIs on the cost of raising new debt or equity. This example illustrates that the after-tax capital tax cost of raising new capital is in the range of 1½% of every dollar of capital raised. If one further assumes that every dollar of capital raised can be leveraged to support ten dollars of loans, the after-tax capital tax cost is reduced to approximately 1¼% of the capital raised and 0.13% (or 13 basis points) of all loans made. This is a significant cost to cover as part of the intermediation margin.

Table 7

Comparative Analysis of Tax Costs Between Canadian Bank and Canadian Non Deposit-Taking Corporation

The following analysis compares net income earned from carrying on lending activities by a Canadian bank and by an unregulated non-deposit-taking provider. This analysis sets out in the third column the additional revenue (and related taxes) that a Canadian bank would be required to raise in order to achieve the same return on capital as the non deposit-taking lending corporation.

| Lending Activities | Canadian Bank | | Non Deposit-taking Lending Corporation | | Competitive Canadian Bank | |
|--|-------------------------|-----------|--|-----------|---------------------------|-----------|
| | % of Total Assets | | % of Total Assets | | % of Total Assets | |
| | Cdn. \$000 | (in b.p.) | Cdn. \$000 | (in b.p.) | Cdn. \$000 | (in b.p.) |
| Revenue | 85,000 | 170 | 85,000 | 170 | 85,000 | 170 |
| Required increase in revenue to obtain competitive return on capital | n/a | 0 | n/a | 0 | 5,974 | 12 |
| | 85,000 | 70 | 85,000 | 170 | 90,974 | 182 |
| Expenses | (10,000) ⁽¹⁾ | (20) | (10,000) ⁽¹⁾ | (20) | (10,000) ⁽¹⁾ | (20) |
| Net Income Before Capital and Income Tax | 75,000 ⁽²⁾ | 150 | 75,000 ⁽²⁾ | 150 | 80,974 ⁽²⁾ | 162 |
| Provincial Capital Tax | (6,696) ⁽³⁾ | (13) | (2,010) ⁽³⁾ | (4) | (6,696) ⁽³⁾ | (13) |
| Net Income Before Income Tax | 68,304 | 137 | 72,990 | 146 | 74,278 | 149 |
| Large Corporations Tax (net of surtax) | (360) ⁽³⁾ | | (308) ⁽³⁾ | (1) | (293) ⁽³⁾ | (1) |
| Non-Deductible Temporary Surcharge | (750) ⁽³⁾ | (2) | n/a ⁽³⁾ | 0 | (750) ⁽³⁾ | (2) |
| Income Tax (at 43%) ⁽⁴⁾ | (29,370) | (57) | (31,386) | (62) | (31,939) | (63) |
| Net Income | 37,824 | 77 | 41,296 | 83 | 41,296 | 84 |
| Total Capital Used | 500 million | | 500 million | | 500 million | |
| Return on Total Capital ⁽⁵⁾ | 7.56% | | 8.26% | | 8.26% | |

Assumptions:

⁽¹⁾ Expenses are assumed to be 20 basis points of portfolio

⁽²⁾ The business comprises assets of \$5 billion. Net earnings before capital and income tax are equal to 150 basis points of total assets. Capital (i.e. common and preferred equity and sub-debt) required to support the business is \$500 million (10% capital requirement).

⁽³⁾ Assume provincial capital tax applies based on provincial allocations in Note 4 below and using the same allocation between provinces in both cases. For the non-bank corporation assume no election is made to be taxed as a financial institution and that it is making corporate loans that are 90% eligible investments. Large Corporations Tax is levied at 0.225% and is partially offset by Part I Surtax. In addition, banks are subject to a non-deductible capital tax of 0.15% (Temporary Surcharge).

(4) Provincial allocations:

| | Business % | Income Tax Rate |
|----------------------------|-------------------|------------------------|
| Quebec | 30 | 9.1% |
| Ontario | 40 | 15.5% |
| Rest of Canada | 30 | 16.0% |
| Blended Provincial Rate | | 14% |
| Federal Rate (plus surtax) | | 29% |
| Total Rate | | 43% |

(5) Return on total capital is the ratio of net income over total capital used. Total capital includes common shares, preferred shares and subordinated debt required to carry on lending activities. It is assumed that the same amount of capital will be required by both the Canadian bank and the non deposit-taking lending corporation.

Table 8

Comparative Analysis of Tax Costs Between Canadian Bank, U.S. Bank and U.K. Bank

The following analysis compares net income earned from carrying on lending activities in Canada by a Canadian bank and by U.S. and U.K. banks in their own jurisdictions. This analysis sets out in columns 4 and 5 the additional revenue (and related taxes) that a Canadian bank would be required to raise in order to achieve the same return on capital as the U.S. or U.K. bank.

| Lending Activities | Canadian Bank | | U.S. Bank | | U.K. Bank | | Canadian Bank vs. U.S. Bank ⁽¹⁾ | | Canadian Bank vs. U.K. Bank ⁽¹⁾ | |
|--|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|--|-----------------------------|--|-----------------------------|
| | Cdn. \$000 | % of Total Assets (in b.p.) | Cdn. \$000 | % of Total Assets (in b.p.) | Cdn. \$000 | % of Total Assets (in b.p.) | Cdn. \$000 | % of Total Assets (in b.p.) | Cdn. \$000 | % of Total Assets (in b.p.) |
| Revenue | 85,000 | 170 | 85,000 | 170 | 85,000 | 170 | 85,000 | 170 | 85,000 | 170 |
| Required increase in revenue to obtain competitive return on capital | n/a | 0 | n/a | 0 | n/a | 0 | 14,929 | 30 | 23,963 | 48 |
| Expenses | 85,000 | 170 | 85,000 | 170 | 85,000 | 170 | 99,929 | 200 | 108,963 | 218 |
| Net Income Before Capital and Income Tax | (10,000) ⁽¹⁾ | (20) | (10,000) ⁽¹⁾ | (20) | (10,000) ⁽¹⁾ | (20) | (10,000) ⁽¹⁾ | (20) | (10,000) ⁽¹⁾ | (20) |
| Provincial Capital Tax | 75,000 ⁽²⁾ | 150 | 75,000 ⁽²⁾ | 150 | 75,000 ⁽²⁾ | 150 | 89,929 ⁽³⁾ | 180 | 98,963 ⁽³⁾ | 198 |
| Net Income Before Income Tax | (6,696) ⁽³⁾ | (13) | 0 ⁽³⁾ | 0 | 0 ⁽³⁾ | 0 | (6,696) ⁽³⁾ | (13) | (6,696) ⁽³⁾ | (13) |
| Large Corporations Tax (net of Surtax) | 68,304 | 137 | 75,000 | 150 | 75,000 | 150 | 83,233 | 167 | 92,267 | 185 |
| Non-Deductible Temporary Surcharge | (360) ⁽³⁾ | (1) | n/a | 0 | n/a | 0 | (192) ⁽³⁾ | 0 | (92) ⁽³⁾ | 0 |
| Income Tax (at 43%, 38% and 31%) | (750) ⁽³⁾ | (2) | n/a | 0 | n/a | 0 | (750) ⁽³⁾ | (2) | (750) ⁽³⁾ | (2) |
| Net Income | (29,370) | (59) | (28,500) | (57) | (23,250) | (47) | (35,791) | (72) | (39,675) | (79) |
| Total Capital Used | 37,824 | 76 | 46,500 | 93 | 51,750 | 104 | 46,500 | 93 | 51,750 | 104 |
| Return on Total Capital ⁽⁴⁾ | 500 million | | 500 million | | 500 million | | 500 million | | 500 million | |
| | 7.56% | | 9.30% | | 10.35% | | 9.30% | | 10.35% | |

Assumptions:

- ⁽¹⁾ Expenses are assumed to be 20 basis points of portfolio.
- ⁽²⁾ The business comprises assets of \$5 billion. Net earnings before capital and income tax are equal to 150 basis points of total assets. Capital required to support the business is \$500 million (10% capital requirement).
- ⁽³⁾ Provincial capital tax is levied in Canada on the Canadian bank at the same rate as outlined in Table 7. Canadian banks are subject to a non-deductible federal capital tax of 0.15% (Temporary Surcharge). Large Corporations Tax is levied at 0.225% and is partially offset by Part I Surtax. No capital tax is levied in the U.S. or in the U.K. No consideration is given to any reserve requirements.
- ⁽⁴⁾ Return on total capital is the ratio of net income over total capital used. Total capital includes common shares, preferred shares and subordinated debt required to carry on lending activities. It is assumed that the same amount of capital will be required by the Canadian Bank, the U.S. and the U.K. bank.

Table 9
**Impact of the Capital Tax System on the
Cost of Raising New Capital (Debt or Equity)**

| | (dollars) | |
|--|-----------|----------------------|
| New Capital | 1,000 | 1,000 |
| New Deposits | --- | 9,000 ⁽²⁾ |
| Funds Raised – Total | 1,000 | 10,000 |
| Funds Deployed – New Loans | 1,000 | 10,000 |
| Capital Taxes (after tax) ^{(1) (3) (4)} | | |
| Federal | 4.94 | 1.78 ⁽⁵⁾ |
| Provincial | 11.20 | 11.20 |
| | 16.14 | 12.98 |
| Capital Taxes | | |
| As a % of New Capital | 1.61% | 1.29% |
| As a % of New Loans | 1.61% | 0.13% |

Assumptions:

- (1) For each \$1,000 raised as equity the business can earn 6%; for each \$1,000 raised as debt, the business can earn a net spread of 150 basis points. Expenses are assumed to be 20 basis points of portfolio.
- (2) For each \$1,000 raised that is subject to capital tax the business can raise \$9,000 that is not subject to capital tax (e.g. deposits) to support a loan portfolio of \$10,000.
- (3) Assuming provincial capital tax applies based on provincial allocations in Note 4 below. Large Corporations Tax is levied at 0.225% and is partially offset by Part I surtax. In addition, banks are subject to a non-deductible capital tax of 0.15% (Temporary Surcharge).
- (4) Provincial Allocations:

| | |
|------------------|-----|
| Quebec | 25% |
| Ontario | 33% |
| British Columbia | 17% |
| Rest of Canada | 25% |
- (5) As the business is leveraged up and earns more income, it incurs more Part I tax and surtax and the accompanying Part VI and LCT credits. Residual federal capital tax liability relates to lack of full LCT offset and non-deductible/non-creditable Temporary Surcharge.

7. Assessing Competitiveness – Savings Vehicles

Comparison of the Taxation of Insurance and Bank Products Owned by Individual Canadians

The major area of competition between banks and life insurance companies is in savings products for individuals.

Bank products fall into two major categories:

- Savings accounts that allow withdrawal at any time without penalty and pay a fixed rate of interest that may be varied at any time.
- Guaranteed investments that may or may not allow withdrawals and pay a fixed rate of interest for a defined period, usually five years or less.

Bank customers are required to include accrued investment income in taxable income each year under both types of products. The bank is allowed to deduct an amount equal to the amount credited to the customer as well as deducting both its marketing and administration expenses in the years in which they are incurred.

Life insurers compete with these bank products with two quite different product types:

- **Deferred annuities** are savings contracts that allow the holders a choice of guaranteed investment options similar to savings accounts and guaranteed investment certificates offered by banks. Often, the deferred annuity will allow the holder to allocate his funds to more than one option at a time and to switch between options. The holder is taxed each year on the investment income accrued under the contract, as he would be if he held a similar bank product. However, insurers account for marketing expenses differently from banks, effectively amortising these expenses over the expected life of the contract. This accounting must also be used to determine the insurer's taxable income. This amortisation can add two to three basis points to the insurer's cost of a particular product compared to the bank's cost for an otherwise comparable product. Table 10 shows that the insurer would have to earn 2.27 basis points higher investment income than a bank to support a five-year, 7% guaranteed investment.
- **Exempt life insurance** policies are unique to the life insurance industry. The holder of a life insurance policy is exempt from taxation on the accumulating investment income component of the policy if the policy meets a prescribed test (the "exempt test") that is intended to limit this treatment to policies with annual or more frequent premiums and a relatively low ratio of savings to insurance; that is, a savings component that is less for policies issued before age 65 than the savings component of a 20-Pay Endowment at age 85. Holders of exempt policies are subject to income tax at the time of receipt of benefits (other than benefits received on death) on the gain on surrender (the excess of the amount received plus the value of pure life insurance benefits over premiums paid). If the policy is not exempt, policyholders are taxed each year on the investment income accrued within the policy. As a result, very few non-exempt policies are issued.

The taxation of the insurer is equally complex. Insurers are subject to a provincial premium tax of 2% or more on all premiums paid under policies other than annuities, including the savings component of the premium. The insurer is subject to income tax on its income from the policy but is also subject to tax under Part XII.3 of the Income Tax Act at 15% on the investment income deemed to be credited to the policy each year (the "IIT"). If the policy is surrendered, the insurer reduces its tax by an amount that increases to 7.5% of the surrender gain after 1999.

Assuming (and it is reasonable to assume) that the insurer passes its IIT and premium tax cost to the policyholder, the effective tax rate on the investment income that actually reaches the policyholder varies significantly depending on a number of factors, including:

- The insurer's nominal credited interest rate (premium tax is a smaller factor if the credited rate is higher).
- The length of time the policy remains in force (the effective tax rate declines the longer the policy is in force).
- The policyholder's nominal income tax rate.
- Whether the policyholder keeps the policy until death (the effective tax rate on death is much smaller than on surrender).

For example, if the insurer nominally credits 6% interest and passes along all IIT costs and its IIT deduction for amounts taxable to the policyholder on surrender of the policy, if the insurer's charge for insurance and administration is equal to the prescribed net cost of pure insurance, and if the policyholder has a marginal combined federal and provincial income tax rate of 40%, then the effective tax rate to the policyholder is as follows:

| Holding Period | Policy Terminated by | | Comparable Bank Product or Deferred Annuity |
|----------------|----------------------|------------------|--|
| | Surrender | Death percent | |
| 1 Year | 61 | 40 | 40 |
| 5 Years | 44 | 16 | 40 |
| 10 Years | 39 | 10 | 40 |
| 20 Years | 33 | 7 | 40 |
| 30 Years | 29 | 6 | 40 |
| 40 Years | 25 | 6 | 40 |

The methodology to make these calculations is set out in Tables 11 and 12.

In general, one could conclude that the tax system slightly favours banks in those products where banks and insurers compete most directly. The tax system favours exempt life insurance policies if held for a significant period, but these policies are at a tax disadvantage if held for less than about 10 years. Finally, any competitive issues between products becomes less important as cross-ownership is allowed between these sectors (although any bias is still important to the consumer).

Table 10

Comparison of Taxation of Banks and Insurers 5 Year GIC-type Product

| Year | BANK | | INSURER | | | | | | | | | | | | |
|------|-------------------------|-------------------|------------------------------|--------------------|----------------|------------|--------------------------|--------------------|---------|-----------------|----------------------------------|------------------------------|----------------|------------|--------------------------|
| | Opening Account Balance | Expense Deduction | Investment Income at 7.4935% | Interest Deduction | Taxable Income | Tax at 44% | Available for Investment | Opening Cash Value | Expense | Opening Reserve | Premium/Income/Reserve Deduction | Investment Income at 7.5162% | Taxable Income | Tax at 44% | Available for Investment |
| 1 | 1000.00 | 17.00 | 73.66 | 70.00 | -13.34 | -5.87 | 983.00 | 1000.00 | 17.00 | 983.00 | 55.42 | 73.88 | 1.46 | 0.64 | 983.00 |
| 2 | 1070.00 | 2.00 | 79.47 | 74.90 | 2.57 | 1.13 | 1060.53 | 1070.00 | 2.00 | 1055.42 | 77.76 | 79.24 | -0.52 | -0.23 | 1054.24 |
| 3 | 1144.90 | 2.00 | 85.19 | 80.14 | 3.05 | 1.34 | 1136.87 | 1144.90 | 2.00 | 1133.18 | 83.49 | 85.06 | -0.43 | -0.19 | 1131.71 |
| 4 | 1225.04 | 2.00 | 91.32 | 85.75 | 3.57 | 1.57 | 1218.72 | 1225.04 | 2.00 | 1216.67 | 89.64 | 91.32 | -0.32 | -0.14 | 1214.96 |
| 5 | 1310.80 | 2.00 | 97.90 | 91.76 | 4.14 | 1.82 | 1306.47 | 1310.80 | 2.00 | 1306.31 | 96.24 | 98.04 | -0.20 | -0.09 | 1304.42 |
| 6 | 1402.55 | | | | | | 1402.55 | 1402.55 | | 1402.55 | | | | | 1402.55 |

Table 11
Effective Tax Burden on Exempt Life Insurance

| Year | Savings Premium | Premium Tax | Interest at 6% | Credited End of Year | Gain on Surrender | IT on Surrender | Total Fund | Policyholder Gain | Policyholder Tax on Gain at 40% | Policyholder Net Fund | Policyholder Internal Rate of Return | Effective Tax Rate |
|------|-----------------|-------------|----------------|----------------------|-------------------|-----------------|------------|-------------------|---------------------------------|-----------------------|--------------------------------------|--------------------|
| 0 | 100.00 | 2.00 | | | | | | | | | | |
| 1 | 100.00 | 2.00 | 0.26 | 5.88 | 103.62 | 3.62 | (0.27) | 103.89 | 3.89 | 1.56 | 2.34% | 61% |
| 2 | 100.00 | 2.00 | 0.53 | 12.10 | 213.19 | 13.19 | (0.99) | 214.18 | 14.18 | 5.67 | 2.81% | 53% |
| 3 | 100.00 | 2.00 | 0.81 | 18.67 | 329.05 | 29.05 | (2.18) | 331.23 | 31.23 | 12.49 | 3.06% | 49% |
| 4 | 100.00 | 2.00 | 1.12 | 25.62 | 451.56 | 51.56 | (3.87) | 455.42 | 55.42 | 22.17 | 3.22% | 46% |
| 5 | 100.00 | 2.00 | 1.44 | 32.97 | 581.09 | 81.09 | (6.08) | 587.18 | 87.18 | 34.87 | 3.34% | 44% |
| 6 | 100.00 | 2.00 | 1.77 | 40.75 | 718.07 | 118.07 | (8.86) | 726.92 | 126.92 | 50.77 | 3.42% | 43% |
| 7 | 100.00 | 2.00 | 2.13 | 48.96 | 862.90 | 162.90 | (12.22) | 875.12 | 175.12 | 70.05 | 3.50% | 42% |
| 8 | 100.00 | 2.00 | 2.51 | 57.65 | 1,016.04 | 216.04 | (16.20) | 1,032.25 | 232.25 | 92.90 | 3.56% | 41% |
| 9 | 100.00 | 2.00 | 2.91 | 66.84 | 1,177.98 | 277.98 | (20.85) | 1,198.83 | 298.83 | 119.53 | 3.61% | 40% |
| 10 | 100.00 | 2.00 | 3.33 | 76.56 | 1,349.21 | 349.21 | (26.19) | 1,375.40 | 375.40 | 150.16 | 3.66% | 39% |
| 11 | 100.00 | 2.00 | 3.78 | 86.83 | 1,530.26 | 430.26 | (32.27) | 1,562.53 | 462.53 | 185.01 | 3.71% | 38% |
| 12 | 100.00 | 2.00 | 4.25 | 97.70 | 1,721.71 | 521.71 | (39.13) | 1,760.83 | 560.83 | 224.33 | 3.75% | 38% |
| 13 | 100.00 | 2.00 | 4.75 | 109.18 | 1,924.14 | 624.14 | (46.81) | 1,970.95 | 670.95 | 268.38 | 3.79% | 37% |
| 14 | 100.00 | 2.00 | 5.28 | 121.33 | 2,138.19 | 738.19 | (55.36) | 2,193.55 | 793.55 | 317.42 | 3.82% | 36% |
| 15 | 100.00 | 2.00 | 5.84 | 134.17 | 2,364.52 | 864.52 | (64.84) | 2,429.36 | 929.36 | 371.75 | 3.86% | 36% |
| 16 | 100.00 | 2.00 | 6.43 | 147.75 | 2,603.85 | 1,003.85 | (75.29) | 2,679.14 | 1,079.14 | 431.65 | 3.89% | 35% |
| 17 | 100.00 | 2.00 | 7.05 | 162.11 | 2,856.91 | 1,156.91 | (86.77) | 2,943.67 | 1,243.67 | 497.47 | 3.92% | 35% |
| 18 | 100.00 | 2.00 | 7.71 | 177.29 | 3,124.49 | 1,324.49 | (99.34) | 3,223.83 | 1,423.83 | 569.53 | 3.96% | 34% |
| 19 | 100.00 | 2.00 | 8.41 | 193.35 | 3,407.43 | 1,507.43 | (113.06) | 3,520.49 | 1,620.49 | 648.19 | 3.98% | 34% |
| 20 | 100.00 | 2.00 | 9.15 | 210.33 | 3,706.61 | 1,706.61 | (128.00) | 3,834.60 | 1,834.60 | 733.84 | 4.01% | 33% |
| 21 | 100.00 | 2.00 | 9.93 | 228.28 | 4,022.95 | 1,922.95 | (144.22) | 4,167.17 | 2,067.17 | 826.87 | 4.04% | 33% |
| 22 | 100.00 | 2.00 | 10.75 | 247.26 | 4,357.46 | 2,157.46 | (161.81) | 4,519.26 | 2,319.26 | 927.71 | 4.07% | 32% |
| 23 | 100.00 | 2.00 | 11.63 | 267.33 | 4,711.16 | 2,411.16 | (180.84) | 4,891.99 | 2,591.99 | 1,036.80 | 4.09% | 32% |
| 24 | 100.00 | 2.00 | 12.55 | 288.55 | 5,085.15 | 2,685.15 | (201.39) | 5,286.54 | 2,886.54 | 1,154.62 | 4.12% | 31% |
| 25 | 100.00 | 2.00 | 13.53 | 310.99 | 5,480.62 | 2,980.62 | (223.55) | 5,704.16 | 3,204.16 | 1,281.67 | 4.14% | 31% |
| 26 | 100.00 | 2.00 | 14.56 | 334.72 | 5,898.78 | 3,298.78 | (247.41) | 6,146.18 | 3,546.18 | 1,418.47 | 4.17% | 31% |
| 27 | 100.00 | 2.00 | 15.65 | 359.81 | 6,340.93 | 3,640.93 | (273.07) | 6,614.00 | 3,914.00 | 1,565.60 | 4.19% | 30% |
| 28 | 100.00 | 2.00 | 16.80 | 386.34 | 6,808.47 | 4,008.47 | (300.63) | 7,109.10 | 4,309.10 | 1,723.64 | 4.22% | 30% |
| 29 | 100.00 | 2.00 | 18.02 | 414.39 | 7,302.83 | 4,402.83 | (330.21) | 7,633.04 | 4,733.04 | 1,893.22 | 4.24% | 29% |
| 30 | 100.00 | 2.00 | 19.31 | 444.05 | 7,825.57 | 4,825.57 | (361.92) | 8,187.49 | 5,187.49 | 2,074.99 | 4.26% | 29% |
| 31 | 100.00 | 2.00 | 20.68 | 475.41 | 8,378.31 | 5,278.31 | (395.87) | 8,774.18 | 5,674.18 | 2,269.69 | 4.29% | 29% |
| 32 | 100.00 | 2.00 | 22.12 | 508.58 | 8,962.76 | 5,762.76 | (432.21) | 9,394.97 | 6,194.97 | 2,477.99 | 4.31% | 28% |
| 33 | 100.00 | 2.00 | 23.64 | 543.65 | 9,580.77 | 6,280.77 | (471.06) | 10,051.82 | 6,751.82 | 2,700.73 | 4.33% | 28% |
| 34 | 100.00 | 2.00 | 25.26 | 580.73 | 10,234.24 | 6,834.24 | (512.57) | 10,746.80 | 7,346.80 | 2,938.72 | 4.35% | 27% |
| 35 | 100.00 | 2.00 | 26.96 | 619.93 | 10,925.21 | 7,425.21 | (556.99) | 11,482.10 | 7,982.10 | 3,192.84 | 4.37% | 27% |
| 36 | 100.00 | 2.00 | 28.76 | 661.39 | 11,655.84 | 8,055.84 | (604.19) | 12,260.02 | 8,660.02 | 3,464.01 | 4.39% | 27% |
| 37 | 100.00 | 2.00 | 30.67 | 705.23 | 12,428.39 | 8,728.39 | (654.63) | 13,083.02 | 9,383.02 | 3,753.21 | 4.41% | 26% |
| 38 | 100.00 | 2.00 | 32.69 | 751.58 | 13,245.29 | 9,445.29 | (708.40) | 13,953.69 | 10,153.69 | 4,061.47 | 4.43% | 26% |
| 39 | 100.00 | 2.00 | 34.82 | 800.60 | 14,109.07 | 10,209.07 | (765.68) | 14,874.75 | 10,974.75 | 4,389.90 | 4.45% | 26% |
| 40 | 100.00 | 2.00 | 37.07 | 852.42 | 15,022.42 | 11,022.42 | (826.68) | 15,849.10 | 11,849.10 | 4,739.64 | 4.47% | 25% |

Assumptions:

Total premium is a savings component of \$100 per year plus an insurance component sufficient to cover the insurer's charges for insurance and expenses. Insurer passes on all tax costs and benefits to the policyholder.

Table 12
Effective Tax Burden on Exempt Life Insurance

| Year | Savings Premium | Premium Tax | IIIT | Credited Interest at 6% | End of Year Policyholder Fund | Gain on Surrender | IIIT on Surrender | Total Fund | Policyholder Gain | Policyholder Tax on Gain at 30% | Policyholder Net Fund | Policyholder Internal Rate of Return | Effective Tax Rate |
|------|-----------------|-------------|-------|-------------------------|-------------------------------|-------------------|-------------------|------------|-------------------|---------------------------------|-----------------------|--------------------------------------|--------------------|
| 0 | 100.00 | 2.00 | | | | | | | | | | | |
| 1 | 100.00 | 2.00 | 0.26 | 5.88 | 103.62 | 3.62 | 0.00 | 103.62 | 3.62 | 0.00 | 103.62 | 3.62% | 40% |
| 2 | 100.00 | 2.00 | 0.53 | 12.10 | 213.19 | 13.19 | 0.00 | 213.19 | 13.19 | 0.00 | 213.19 | 4.33% | 28% |
| 3 | 100.00 | 2.00 | 0.81 | 18.67 | 329.05 | 29.05 | 0.00 | 329.05 | 29.05 | 0.00 | 329.05 | 4.69% | 22% |
| 4 | 100.00 | 2.00 | 1.12 | 25.62 | 451.56 | 51.56 | 0.00 | 451.56 | 51.56 | 0.00 | 451.56 | 4.91% | 18% |
| 5 | 100.00 | 2.00 | 1.44 | 32.97 | 581.09 | 81.09 | 0.00 | 581.09 | 81.09 | 0.00 | 581.09 | 5.05% | 16% |
| 6 | 100.00 | 2.00 | 1.77 | 40.75 | 718.07 | 118.07 | 0.00 | 718.07 | 118.07 | 0.00 | 718.07 | 5.16% | 14% |
| 7 | 100.00 | 2.00 | 2.13 | 48.96 | 862.90 | 162.90 | 0.00 | 862.90 | 162.90 | 0.00 | 862.90 | 5.23% | 13% |
| 8 | 100.00 | 2.00 | 2.51 | 57.65 | 1,016.04 | 216.04 | 0.00 | 1,016.04 | 216.04 | 0.00 | 1,016.04 | 5.29% | 12% |
| 9 | 100.00 | 2.00 | 2.91 | 66.84 | 1,177.98 | 277.98 | 0.00 | 1,177.98 | 277.98 | 0.00 | 1,177.98 | 5.34% | 11% |
| 10 | 100.00 | 2.00 | 3.33 | 76.56 | 1,349.21 | 349.21 | 0.00 | 1,349.21 | 349.21 | 0.00 | 1,349.21 | 5.38% | 10% |
| 11 | 100.00 | 2.00 | 3.78 | 86.83 | 1,530.26 | 430.26 | 0.00 | 1,530.26 | 430.26 | 0.00 | 1,530.26 | 5.41% | 10% |
| 12 | 100.00 | 2.00 | 4.25 | 97.70 | 1,721.71 | 521.71 | 0.00 | 1,721.71 | 521.71 | 0.00 | 1,721.71 | 5.44% | 9% |
| 13 | 100.00 | 2.00 | 4.75 | 109.18 | 1,924.14 | 624.14 | 0.00 | 1,924.14 | 624.14 | 0.00 | 1,924.14 | 5.46% | 9% |
| 14 | 100.00 | 2.00 | 5.28 | 121.33 | 2,138.19 | 738.19 | 0.00 | 2,138.19 | 738.19 | 0.00 | 2,138.19 | 5.48% | 9% |
| 15 | 100.00 | 2.00 | 5.84 | 134.17 | 2,364.52 | 864.52 | 0.00 | 2,364.52 | 864.52 | 0.00 | 2,364.52 | 5.50% | 8% |
| 16 | 100.00 | 2.00 | 6.43 | 147.75 | 2,603.85 | 1,003.85 | 0.00 | 2,603.85 | 1,003.85 | 0.00 | 2,603.85 | 5.52% | 8% |
| 17 | 100.00 | 2.00 | 7.05 | 162.11 | 2,856.91 | 1,156.91 | 0.00 | 2,856.91 | 1,156.91 | 0.00 | 2,856.91 | 5.53% | 8% |
| 18 | 100.00 | 2.00 | 7.71 | 177.29 | 3,124.49 | 1,324.49 | 0.00 | 3,124.49 | 1,324.49 | 0.00 | 3,124.49 | 5.54% | 8% |
| 19 | 100.00 | 2.00 | 8.41 | 193.35 | 3,407.43 | 1,507.43 | 0.00 | 3,407.43 | 1,507.43 | 0.00 | 3,407.43 | 5.56% | 7% |
| 20 | 100.00 | 2.00 | 9.15 | 210.33 | 3,706.61 | 1,706.61 | 0.00 | 3,706.61 | 1,706.61 | 0.00 | 3,706.61 | 5.57% | 7% |
| 21 | 100.00 | 2.00 | 9.93 | 228.28 | 4,022.95 | 1,922.95 | 0.00 | 4,022.95 | 1,922.95 | 0.00 | 4,022.95 | 5.57% | 7% |
| 22 | 100.00 | 2.00 | 10.75 | 247.26 | 4,357.46 | 2,157.46 | 0.00 | 4,357.46 | 2,157.46 | 0.00 | 4,357.46 | 5.58% | 7% |
| 23 | 100.00 | 2.00 | 11.63 | 267.33 | 4,711.16 | 2,411.16 | 0.00 | 4,711.16 | 2,411.16 | 0.00 | 4,711.16 | 5.59% | 7% |
| 24 | 100.00 | 2.00 | 12.55 | 288.55 | 5,085.15 | 2,685.15 | 0.00 | 5,085.15 | 2,685.15 | 0.00 | 5,085.15 | 5.60% | 7% |
| 25 | 100.00 | 2.00 | 13.53 | 310.99 | 5,480.62 | 2,980.62 | 0.00 | 5,480.62 | 2,980.62 | 0.00 | 5,480.62 | 5.60% | 7% |
| 26 | 100.00 | 2.00 | 14.56 | 334.72 | 5,898.78 | 3,298.78 | 0.00 | 5,898.78 | 3,298.78 | 0.00 | 5,898.78 | 5.61% | 7% |
| 27 | 100.00 | 2.00 | 15.65 | 359.81 | 6,340.93 | 3,640.93 | 0.00 | 6,340.93 | 3,640.93 | 0.00 | 6,340.93 | 5.62% | 6% |
| 28 | 100.00 | 2.00 | 16.80 | 386.34 | 6,808.47 | 4,008.47 | 0.00 | 6,808.47 | 4,008.47 | 0.00 | 6,808.47 | 5.62% | 6% |
| 29 | 100.00 | 2.00 | 18.02 | 414.39 | 7,302.83 | 4,402.83 | 0.00 | 7,302.83 | 4,402.83 | 0.00 | 7,302.83 | 5.62% | 6% |
| 30 | 100.00 | 2.00 | 19.31 | 444.05 | 7,825.57 | 4,825.57 | 0.00 | 7,825.57 | 4,825.57 | 0.00 | 7,825.57 | 5.63% | 6% |
| 31 | 100.00 | 2.00 | 20.68 | 475.41 | 8,378.31 | 5,278.31 | 0.00 | 8,378.31 | 5,278.31 | 0.00 | 8,378.31 | 5.63% | 6% |
| 32 | 100.00 | 2.00 | 22.12 | 508.58 | 8,962.76 | 5,762.76 | 0.00 | 8,962.76 | 5,762.76 | 0.00 | 8,962.76 | 5.64% | 6% |
| 33 | 100.00 | 2.00 | 23.64 | 543.65 | 9,580.77 | 6,280.77 | 0.00 | 9,580.77 | 6,280.77 | 0.00 | 9,580.77 | 5.64% | 6% |
| 34 | 100.00 | 2.00 | 25.26 | 580.73 | 10,234.24 | 6,834.24 | 0.00 | 10,234.24 | 6,834.24 | 0.00 | 10,234.24 | 5.64% | 6% |
| 35 | 100.00 | 2.00 | 26.96 | 619.93 | 10,925.21 | 7,425.21 | 0.00 | 10,925.21 | 7,425.21 | 0.00 | 10,925.21 | 5.65% | 6% |
| 36 | 100.00 | 2.00 | 28.76 | 661.39 | 11,655.84 | 8,055.84 | 0.00 | 11,655.84 | 8,055.84 | 0.00 | 11,655.84 | 5.65% | 6% |
| 37 | 100.00 | 2.00 | 30.67 | 705.23 | 12,428.39 | 8,728.39 | 0.00 | 12,428.39 | 8,728.39 | 0.00 | 12,428.39 | 5.65% | 6% |
| 38 | 100.00 | 2.00 | 32.69 | 751.58 | 13,245.29 | 9,445.29 | 0.00 | 13,245.29 | 9,445.29 | 0.00 | 13,245.29 | 5.66% | 6% |
| 39 | 100.00 | 2.00 | 34.82 | 800.60 | 14,109.07 | 10,209.07 | 0.00 | 14,109.07 | 10,209.07 | 0.00 | 14,109.07 | 5.66% | 6% |
| 40 | 100.00 | 2.00 | 37.07 | 852.42 | 15,022.42 | 11,022.42 | 0.00 | 15,022.42 | 11,022.42 | 0.00 | 15,022.42 | 5.66% | 6% |

Assumptions:

Total premium is a savings component of \$100 per year plus an insurance component sufficient to cover the insurer's charges for insurance and expenses. Insurer passes on all tax costs and benefits to the policyholder. Policy deemed held until death of policyholder.

8. Assessing Competitiveness – Specific Tax Issues

Capital Taxes

In conducting this study, a number of concerns were raised with respect to capital taxes – in fact, more concerns were raised with respect to capital taxes than any other issue. Capital taxes have been part of the provincial tax system for many years, although only since 1986 has the federal government levied capital taxes. The federal government introduced capital taxes in the mid-80s as the income tax system was not working effectively in the financial sector. Capital taxes are a blunt instrument – it is difficult to fine-tune a capital tax, and as capital becomes more mobile, it will become increasingly difficult to tax capital.

Specific concerns with respect to capital taxes are set out below:

- Table 2 sets out the differential capital tax rates between the FI and non-FI sector. This table indicates that nominal rates of capital tax on financial institutions are higher than on the non-FI sector. It is noteworthy that the higher rates on the FI sector apply regardless of how the FI uses the funds; it is a bright-line test – based on the nature of the institution rather than on any functional classification or use of funds. For example, fee income earned by a bank which is included in retained earnings is subject to approximately ten times the capital tax cost as the identical service income earned by a non-FI. A common capital tax rate across all sectors would be more indicative of a level playing field, particularly when there is competition between regulated and non-regulated FIs. While some might argue that the rate of capital tax on financial institutions should be higher than on other enterprises because they pay tax only on shareholders' equity and debentures rather than on total liabilities and shareholders' equity, the better view is that, since financial institutions act as an intermediary between depositors and borrowers, they should only pay capital tax on their own capital and not that provided by depositors.
- On an international basis, Canada is almost unique in having capital taxes – Germany and certain Latin American countries have capital taxes but our major competitors (the U.S. (with the exception of some states) and U.K.) do not. In fact, other than the personal tax system, this is likely the most glaring difference between the Canadian and U.S. system. Since higher capital taxes may be difficult to pass on to borrowers, the choice is either to accept lower rates of return or deploy the capital elsewhere. The analysis in Section 6 indicated that capital tax represents over 1% (on an after-tax basis) for every dollar of capital raised. As capital becomes more mobile, it will be deployed where its cost is less – this could mean offshore, but also taxpayers that operate in more than one province have some ability to shift capital to where the rates are less.
- Special targeted surtaxes, such as the temporary capital tax surcharge on large deposit-taking institutions which was introduced in the 1995 budget, and which are levied on the basis of size and perception of profitability, are singularly inappropriate.

- The fixed nature of capital taxes means they are not sensitive to income levels, which means they could have more of an effect on smaller or less profitable companies.
- If capital taxes are to be retained, they should at least be reduced by income taxes so that they act like a minimum tax. The federal government has recognised this by structuring capital taxes (other than the special Part VI targeted surtax on deposit-taking institutions) so that they can be offset by income taxes, although even very profitable companies can never earn sufficient income to fully eliminate any LCT liability. The key concern is with provincial capital taxes which are deductible but not creditable.
- A number of prudential issues have been raised with respect to capital taxes and these have been summarised in Section 9. These include the tax incentive to reduce capital and the tax incentive to raise capital outside of Canada, as the regulatory definition of capital is on a consolidated basis, while capital tax is levied on a Canadian legal entity basis.
- A lack of federal/provincial harmonisation on capital taxes leads to undue complexity. As far as possible, it would be useful to have a common definition of capital and a common calculation of the capital tax base for financial institutions across all provinces for all provincial and federal purposes. In addition, it is stated federal tax policy that any base changes, rate increases, or new taxes introduced by a province are not deductible for federal income tax purposes except in those provinces which have harmonised with the GST or where federal concurrence is obtained that the changes are revenue neutral. While this federal policy is in response to increased reliance by the provinces on these types of deductible taxes, this potential lack of deductibility makes the imposition of these taxes even harsher and this should not be a taxpayer's concern – the two levels of government should sort out their issues otherwise than on the backs of taxpayers.
- There are a number of specific issues with respect to the computation of the base for capital tax purposes and the investment allowance:
 - The investment allowance can often lead to double taxation if it does not adequately provide an allowance for capital that is otherwise taxed.
 - There is an element of overstatement of capital in those regimes that include fixed assets and tangible property in a financial institution's capital base in addition to its shareholders' equity and debentures. This is because some portion of the shareholders' equity and debentures already funds fixed assets. This is a particular problem for life insurers who hold a large percentage of their assets in real estate.
 - The graduated federal rate scale for life insurance purposes leads to higher levels of taxes on larger institutions where they do not pay sufficient Part I tax.
 - Finally, the full amount of debentures are included in the capital tax base of financial institutions. This is inappropriate in cases where the debentures are within five years of their maturity because debentures nearing maturity do not count fully as regulatory

capital. Debentures should only be included in the capital tax basis to the extent they count for regulatory capital purposes.

- The final problem with capital taxes is that they operate at the margin. For each incremental unit of capital raised through debt or equity that is included in the capital tax base, capital tax is levied. As noted in Section 6, the capital tax represents more than 1% (on an after tax basis) of every dollar of capital raised. While it is beyond the scope of this paper, mechanisms whereby capital tax does not operate at the margin – for example by having the capital tax apply on a fixed level of capital (such as the regulatory level of capital) and not on all capital should be considered to determine if there is a practical solution to alleviate this problem.

Non-Resident Withholding Taxes on Interest Paid or Credited to Non-Residents

Canada levies a 25% non-resident withholding tax on interest paid or credited to non-residents. This rate is reduced to 10% under many of Canada's tax treaties, and on arm's-length indebtedness where no more than 25% of the principal is to be repaid within the first five years, the withholding tax is eliminated by statute. However, on all non-arm's-length borrowings and on short-to-medium-term borrowings from non-resident arm's-length lenders, Canadian withholding tax is applicable.

For foreign lenders operating otherwise than through a Canadian permanent establishment, the non-resident withholding tax is the only tax that the Canadian government collects on this financial activity. Provided the non-resident lender is not operating through a permanent establishment, it would avoid any Canadian capital taxes on the loan, any Canadian income tax on the intermediation margin, and any Canadian GST, property taxes or payroll taxes on inputs used in carrying on the lending activity.

The withholding tax essentially operates as a tariff on the flow of capital and is inconsistent with the spirit of NAFTA, which is to provide for the free flow of goods. Since many non-resident lenders are unable to obtain credit for any Canadian withholding tax paid (10% withholding tax on the gross interest paid is much more than a typical net margin on a loan) the net effect of this rule is that non-residents will either often refrain from loaning into the Canadian market or, alternatively, will make the borrower in Canada incur the cost of this withholding tax. If this is the net outcome of levying the non-resident withholding tax, then it is a fairly effective tariff or barrier to entry which likely leads to a reduced supply of capital in Canada than would otherwise be the case, higher costs of borrowing, and protection for Canadian lenders.

In order to free up competition in this area, consideration could be given to exempting from all withholding tax any arm's-length interest payments (less dramatic changes would be to reduce the withholding tax rate or broaden the current exemption for long-term debt by reducing the five-year requirement). In addition, any Canadian dollar deposits in Canadian banks by non-residents should also be exempt from withholding tax (to parallel the treatment for foreign currency deposits). If this reduction in withholding tax were effected, an issue to be considered is whether

the reduction should be done by Canada on a unilateral basis or on a country-by-country basis as part of treaty negotiations – for example, the United States does not currently exempt from its 10% withholding tax loans made by Canadian banks into the United States. The issue is to ensure Canadian lenders have equal access to foreign markets. In addition, other issues to consider as part of this process include making other tax changes (such as to capital taxes) so that financial institutions could compete on a level playing field once the withholding tax was removed and not applying withholding tax on any allocation of interest expense to the Canadian branch of a Schedule II bank.

Withholding taxes on non-arm's-length interest are beyond the scope of this paper; however, any reductions in withholding tax on non-arm's-length interest would likely only be considered if appropriate changes were made to the thin capitalisation rules to prevent abuse. In addition, if arm's-length borrowings were exempted from withholding tax, the government would have to ensure that there was appropriate "back-to-back" rules to prevent non-arm's-length borrowings from being converted into arm's-length borrowings.

Personal Tax System

While a critique of the personal tax system is beyond the scope of this report, it should be noted that one of the most important competitive issues for the Canadian business community (including the financial services sector) is Canada's high personal tax rates. Many studies have shown that middle to higher income Canadians pay an average tax on personal income that is significantly in excess of the OECD average and higher than the United States, our largest international trade and investment partner. The problem is particularly acute at the top end where Canada's higher marginal tax rates apply at much lower levels of income (approximately \$Cdn 60,000) compared with an income level of \$US250,000 in the United States. Recent changes in the February 1998 federal budget did not alleviate this problem. These high personal marginal tax rates make it difficult for all businesses to attract and retain key talent.

Transaction Taxes (Sales and Premium)

The most significant issue with sales taxes (which are imposed on the customer) and premium taxes (which are levied on the company) is in the insurance industry. The layering of these different taxes, essentially a tax-on-tax, is best illustrated by the following examples:

- In Ontario, a company pays a 7% federal GST and 8% provincial retail sales tax on the cost of repair to an automobile. The sales tax is not recoverable and is factored into the total insurance premium. As part of the premium, the company must levy a 3.5% provincial premium tax. Finally, on top of all this, Ontario levies retail sales tax at 5% on the amount of the insurance premium. A classic tax-on-tax-on-tax.
- Another example is the tax burden imposed on group life and health insurance products in Ontario and Quebec. The perverse aspects of the application of the provincial retail sales tax to these products (which are in addition to a 2% premium tax levied by both provinces) are that:

- It applies not just to the administrative costs of providing the insurance service (the usual tax base for a value-added tax) but also to the portion of the premium that is simply transferred to other insured individuals making claims under their policy;
- It applies to insurance for dental services, prescription drugs, eyeglasses, etc., but not to such goods and services if directly purchased; and
- It applies to salary continuance through disability insurance but not to salary itself.

There is no basis in policy for levying taxes in the above-noted manner. The result is an undue burden on this particular industry. The three provinces where the problem is most severe for the P&C industry are Ontario, Québec and Newfoundland. In the life industry, it is Ontario and Québec. All premium and sales tax rates are summarised on Table 13.

- Most provinces impose premium taxes on P&C and life insurers in lieu of capital taxes. Several points should be noted with respect to these taxes:
 - Premium taxes applicable to life insurance and accident and sickness insurance are typically less (by about 1% on average) than on property and casualty insurance (see Table 13).
 - The tax rates vary significantly between provinces.
 - Given a maximum recommended (by OSFI) premium to capital ratio of 3 to 3.5 times capital and surplus for the P&C industry, a 3.0% premium tax equates to approximately a 10% capital tax. A more normal ratio of premium to capital ratio of two times still yields a 6% rate which is significantly in excess of the rate imposed on banks and other financial institutions.
- With the growing trend towards convergence in risk management with banks underwriting "insurable" risks, insurers underwriting financial risk, and single policies covering both types of risk, insurers will be at a competitive disadvantage to the extent of premium tax on the policies. This is compounded in Newfoundland, Ontario and Quebec where retail sales tax is applied to the premium as well.

Since most financial services are treated as exempt under the GST, many financial service providers are unable to recover much of the GST paid on their purchases and other inputs such as rent. This lack of input credits has increased the burden on the financial sector, although this treatment is at least consistent with that in other countries with a VAT (although the U.S. has no VAT). While the distortions created by the GST are likely not as significant as is the case with capital and premium taxes, and the provincial retail sales taxes applied to certain premiums, there are a few biases which are inherent in the GST design which may give some providers of financial services an advantage over others. A few examples of these are as follows:

- A Canadian branch or subsidiary of a foreign parent must self-assess GST on any charges from its foreign head office. This puts the subsidiary or branch at a competitive disadvantage compared with domestic institutions who would not pay GST on these costs (the assumption

being that a significant component of the cost allocation from the head office are labour costs). This system does not apply to most of the other major VAT jurisdictions.

- Built into the design of the GST is a bias to self-supply or not outsource functions, because GST does not apply to salaries. Larger institutions have the ability to self-supply and thus avoid GST, whereas many smaller institutions have to outsource and incur the GST on their supplies.

The lack of federal/provincial harmonisation in the sales tax area leads to increased complexity, although for this sector, a harmonised system may lead to an increased tax burden. Moreover, under the current mixed harmonisation system, there are instances where a financial institution may pay retail sales tax in a province that is not harmonised and may also pay HST on the same supply or portion thereof through an allocation formula. This leads to some element of double tax.

Measurement of Income

The most significant issue raised on the measurement of income is the mark-to-market rules – and more in their application to the P&C sector rather than any other sector. It has been argued that, as a result of this rule, taxpayers are unable to forecast their final tax liability until year-end as the rules can result in wide fluctuations of income. Moreover, the rule provides a disincentive to hold investments and an incentive to shift investments outside Canada where possible. While the rule does simplify a number of compliance issues with respect to the nature and reporting of income, consideration should be given to at least examining various smoothing options such as amortising the unrealised (or both realised and unrealised) gains/losses over a number of years to minimise the effect the rule will have in any one year.

One area of significant difference is in the income tax treatment for the deduction of loan losses in Canada, the United States and the U.K. In the U.K., banks may deduct for tax purposes all their specific reserves in the year that they established them. In Canada, 10% of the reserve for specific credit losses is not allowed as a tax deduction until the loan is written off as a bad debt, an estimated delay period of two years. In the United States, reserves for credit losses are generally not deductible, the loss being allowed when the loan is written off. This indicates that the United States may have the most restrictive system, although Canadian banks have found that some of the loans against which specific reserves for capital losses have been established within a Canadian environment qualify as a write-off under U.S. tax rules and, accordingly, can be deducted for U.S. tax provision purposes at 100% rather than 90%. The effect of all these timing differences is to increase taxable income by the amount of the disallowable reserve. Over time, the banks will not pay higher taxes but they will pay them earlier. This is a cost, and the cost will likely be greater for U.S. than for Canadian financial institutions, and will likely be greater for both of them than for U.K. institutions.

Credit Unions

Credit unions have certain statutory advantages under the Income Tax Act and it has been argued by some that this gives credit unions a competitive advantage. These differences relate to the ability to claim the small business tax rate on the first \$200,000 of taxable income and the application of capital taxes.

With respect to the small business deduction, credit unions pay the small business tax rate until they grow into the regular corporate rate. In general terms, the small business rate applies until the credit union's tax paid retained earnings reach 5% of amounts owing to members, including deposits and shares. This is an incentive for credit unions to achieve/maintain minimal levels of permanent capital. Market conditions exist for credit unions to grow out of the small business tax rate as their capital positions improve and as their product mix changes. For example, members' preferences for mutual funds and other securities instead of traditional deposits could hasten this shift. Access to small business rates is dependent on the relationship between retained earnings and deposits and shares. As fees increase, especially from the sale of mutual funds and other securities, yet deposit growth stagnates, the ratio of retained earnings to deposits will likely increase and the regular corporate tax rate apply. Only the standard \$200,000 of income remains subject to the low rate, although it too is reduced or eliminated where taxable capital exceeds \$10 million. In addition, dividends are deductible to a credit union, effectively taxing credit union dividends like interest with the return to members taxed at the marginal rate of the member and no corporate tax on this income. This rule recognises the similarity between amounts deposited by members and amounts invested by members in shares which are redeemable at par; both are treated equally.

While the same federal capital tax rules apply to credit unions and other financial institutions, the exemption thresholds (for example the \$10 million capital exemption for the LCT Part I.3 tax and the much larger deduction for Part VI purposes) eliminates any federal capital tax liabilities for many small credit unions. For provincial purposes, the three largest provincial governments – British Columbia, Quebec and Ontario – have each extended the application of capital taxes to credit unions in recent years. In other provinces, credit unions remain exempt from provincial capital taxes, while other financial institutions are subject to tax. Even where provinces tax credit unions, there are often differences in the computation of the base (for example, exclusion of retained earnings and reserves) which provides a benefit to the credit unions.

As a partial offset to the above advantages, credit unions will often incur a disproportionately high level of GST as, due to their small size, they are not capable of self-supplying any of the services that are otherwise subject to GST. Also, because each credit union is a separate taxpayer, there often are no effective means of utilising losses within the credit union system – on the other hand, a multi-branch bank which operates within a single corporation can offset the losses in one branch with income elsewhere.

The most problematic area from a competitive standpoint occurs when large credit unions carry on business through a number of "independent" credit unions that effectively operate like branches. This is an issue in some provinces, such as Québec.

Other Issues

A number of other specific tax issues were raised as part of the consultation process. These include the following:

- Canada does not have a loss transfer/consolidated tax system and, as noted in the discussion under prudential concerns in Section 9, due to regulatory requirements, a corporate group is often not able to utilise losses incurred within the group. This leads to the payment of excess taxes.
- The Income Tax Act does not permit the merger of segregated funds without creating adverse tax consequences to policyholders. Since consolidation of mutual funds on a tax-neutral basis is already permitted, the tax-free merger/de-merger of these funds would provide parallel tax treatment for segregated funds.
- Insurers are facing many difficulties in combining administrative systems on the acquisition of another company or block of business to ensure no adverse policyholder tax implications. This arises from the requirement to preserve the same contractual rates to the policyholder in order to avoid a policy disposition. The orderly restructuring of business would be facilitated if the rollover provisions of the Income Tax Act were broadened to permit a policy exchange where substantially all the rights and privileges in a contract survive in a new contract.

Table 13**Canadian Premium and Fire Tax Rates, 1997**

| Jurisdiction | Premium Tax | | | Fire Tax | Premium and Fire Tax |
|---------------------------------|----------------|-----------------------|-----------------------|--------------|----------------------|
| | Life Insurance | Property and Casualty | Accident and Sickness | | |
| | % of premium | % of premium | % of premium | % of premium | |
| Alberta | 2 | 3 | 2 | Nil | 3 |
| British Columbia ⁽¹⁾ | 2 | 3 | 2 | 1 | 4 |
| Manitoba | 2 | 3 | 2 | 1.25 | 4.25 |
| New Brunswick | 2 | 3 | 2 | 1 | 4 |
| Newfoundland ⁽²⁾ | 4 | 4 | 4 | Nil | 4 |
| Nova Scotia | 3 | 4 | 3 | 1.25 | 5.25 |
| NWT | 3 | 3 | 3 | 1 | 4 |
| Ontario ⁽³⁾ | 2 | 3 | 2 | Nil | 3 |
| PEI ⁽⁵⁾ | 3 | 3 | 3 | 1 | 4 |
| Quebec ⁽⁴⁾ | 2.35 | 3.35 | 2.35 | Nil | 3.35 |
| Saskatchewan ⁽¹⁾ | 2 | 3 | 2 | 1 | 4 |
| Yukon | 2 | 2 | 2 | 1 | 3 |

Notes:

1. British Columbia and Saskatchewan apply an additional Motor Vehicle Insurance premium tax of 1%.
2. Newfoundland applies a retail sales tax of 15% to property and casualty insurance premiums.
3. Ontario levies a premium tax rate of 3.5% on property insurance, with the noted 3% applying to other premiums. It also applies a retail sales tax of 5% on automobile premiums and 8% on all other insurance premiums except individual life and health.
4. Includes 0.35% compensation tax on insurance premiums. Quebec also applies a retail sales tax of 5% on automobile premiums and 9% on all other insurance premiums except individual life and health.
5. Increases to 3.5% January 1, 1998.

9. Prudential Issues

The primary purpose of financial regulation is to protect the public interest and the soundness of the financial sector. The primary purpose of tax planning is to minimise the taxes payable by the financial sector. Accordingly, there are instances where there are elements of the tax treatment of financial institutions that might motivate them to take actions driven by tax planning considerations which could conflict with the objectives of prudential regulation. Set out below are examples of these conflicts:

- ***Capital Tax Issues:***

- Since capital tax is applied to all capital of FIs, there is a tax incentive to reduce capital to the minimum necessary; this could conflict with maintaining as high a capital base as possible for regulatory purposes.
- For regulatory purposes, capital is defined on a consolidated basis (including offshore affiliates) whereas capital tax is determined on Canadian legal entity basis. Accordingly, for tax purposes, there is an incentive to raise or accumulate capital outside Canada – capital that may be more difficult to access if there was ever a failure.
- The fixed nature of many capital taxes and the increasing reliance on high levels of capital tax that are not income-sensitive and thus could impact a financial institution when it can least afford it. Similarly, if there is a prudential need to raise capital, capital taxes directly increase the cost of raising that capital.
- Table 14 shows that, compared to non-FIs, the present interaction of federal capital and income taxes, and the imposition of additional Part VI.1 taxes on certain preferred share dividends, can distort the cost of raising capital. This table shows that compared with a non-FI the cost of raising debt or equity is higher for an FI where the FI's Part I corporate income tax base is reduced below its Part VI capital tax base. This makes the cost of debt or equity higher for less profitable FIs who are not able to offset their Part VI capital tax liability.

- ***Corporate Structures:*** Regulatory restrictions on how a business must be carried on (for example, through separate subsidiaries) often preclude or frustrate the utilisation of losses within a Canadian corporate group. These structures could also lead to increased (or double) capital taxes due to problems with the investment allowance. Accordingly, due to regulatory restrictions, more tax is paid than necessary which not only makes the institution less competitive, but also could raise prudential concerns.

- **Reserves:** Prudent reserves required by regulators are often not always tax deductible. A recent example is the lack of deductible catastrophic reserves for earthquakes. The February 1998 budget alleviated this in part by providing for the deductibility of one element of an earthquake reserve – the "earthquake premium reserve". However, no deduction is allowed for the second element of the reserve – the "earthquake reserve complement". Another example of a prudent reserve which is not deductible for tax purposes is that 10% of the reserve for specific credit losses is not deductible until the loan is written off.
- **Reinsurance:** There is an incentive for insurance companies to reinsure offshore due to lower foreign tax rates; accordingly, assets and investments required to backstop the potential liability are no longer in Canada.
- **CompCorp:** CompCorp is a not-for-profit company created by the life and health insurance industry in early 1990 to create an industry-funded compensation system similar to those established for other financial services (e.g. CDIC). CompCorp is funded by assessments from CompCorp's members. CompCorp has requested that its tax-exempt status apply so that it can accumulate funds (and the earnings on these funds) tax-free in anticipation of future requirements. This would differ from its past "pay-as-you-go" approach. Any investment income on the fund's income would not be excluded from the tax system forever, as any payments out of CompCorp in support of an insolvent institution would be taxable to the insolvent institution. While this treatment would differ from that applied to CDIC, CompCorp's position is that CDIC is backstopped by a Crown guarantee. In the absence of this proposed treatment, many insurance companies would convert non-taxable investment income (otherwise earned by the insurer) into taxable income (earned by CompCorp) as a result of making a contribution to CompCorp. Such treatment would make it uneconomic and unattractive to members to pre-fund CompCorp.
- **Credit Unions:** Credit unions can obtain a better tax rate if they pay all or a significant portion of their income out as patronage dividends. This could affect the liquidity and capital adequacy ratios for the credit union.
- **Tax Burden:** High tax rates, and the inappropriate application of certain taxes (such as sales taxes in the P&C insurance sector) could lead taxpayers to purchase less financial services (such as insurance) than they need. For example, rather than acquiring the appropriate level of insurance, taxpayers may increase deductibles or rely more on self-insurance. Another issue to consider with respect to the tax burden is whether Canadian tax (and other) rules discourage non-residents from providing services in Canada, thus resulting in the Canadian domestic FI group bearing a disproportionate share of risk associated with a downturn in the Canadian economy. Finally, to the extent high Canadian tax rates motivate companies to carry on more of their operations outside Canada, this could result in assets and jobs moving offshore beyond the direct reach of regulators. High Canadian tax rates also motivate Canadian companies (with the exception of life insurers) to operate foreign active businesses in corporations rather than branches.

Table 14

Taxation of New Capital

| | Raise Debt at 8% | | | Raise Debt at 7% | | | Raise Equity at 5% | | |
|---|------------------|------|------|------------------|------|------|--------------------|------|------|
| Financial Institutions | | | | | | | | | |
| Existing Part I Tax | 200 | 100 | 50 | 200 | 100 | 50 | 200 | 100 | 50 |
| Existing Part VI Tax | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Total Existing Tax | 200 | 100 | 100 | 200 | 100 | 100 | 200 | 100 | 100 |
| New Capital | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Dividend Paid | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 50 |
| Interest Paid | 80 | 80 | 80 | 70 | 70 | 70 | 0 | 0 | 0 |
| Income Earned on New Capital | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| New Part VI.1 Tax | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 20 |
| New Part VI Tax | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 |
| New Part I Tax pre-Part VI.1 | 191 | 91 | 41 | 196 | 96 | 46 | 227 | 127 | 77 |
| Less Part VI.1 Deduction | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 20 |
| New Part I Tax | 191 | 91 | 41 | 196 | 96 | 46 | 207 | 107 | 57 |
| Total New Tax | 191 | 115 | 115 | 196 | 115 | 115 | 227 | 135 | 135 |
| Increase in Tax | -9 | 15 | 15 | -4 | 15 | 15 | 27 | 35 | 35 |
| (A) Decrease in Income to Common Shareholders (cost of capital) | 11 | 35 | 35 | 6 | 25 | 25 | 17 | 25 | 25 |
| Corporations Other than Financial Institutions | | | | | | | | | |
| Existing Part I Tax | 200 | 100 | 50 | 200 | 100 | 50 | 200 | 100 | 50 |
| Existing Part VI Tax | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Existing Tax | 200 | 100 | 50 | 200 | 100 | 50 | 200 | 100 | 50 |
| New Capital | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Dividend Paid | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 50 |
| Interest Paid | 80 | 80 | 80 | 70 | 70 | 70 | 0 | 0 | 0 |
| Income Earned on New Capital | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| New Part VI.1 Tax | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 20 |
| New Part VI Tax | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Part I Tax pre-Part VI.1 | 191 | 91 | 41 | 196 | 96 | 46 | 227 | 127 | 77 |
| Less Part VI.1 Deduction | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 20 |
| New Part I Tax | 191 | 91 | 41 | 196 | 96 | 46 | 207 | 107 | 57 |
| Total New Tax | 191 | 91 | 41 | 196 | 96 | 46 | 227 | 127 | 77 |
| Increase in Tax | -9 | -9 | -9 | -5 | -5 | -5 | 27 | 27 | 27 |
| (B) Decrease in Income to Common Shareholders (cost of capital) | 11 | 11 | 11 | 6 | 6 | 6 | 17 | 17 | 17 |
| Difference (A – B) (extra cost of financing to FI) | 0 | 24 | 24 | 0 | 19 | 19 | 0 | 8 | 8 |

All interest expense is assumed to be deductible. All Part I tax rates are assumed to be 45%.

10. Conclusion

The key conclusions are set out in Section 2 and will not be repeated here. Suffice it to say that the financial services marketplace is becoming increasingly competitive (both domestically and internationally) and the current tax system (specifically provincial capital taxes, federal capital taxes that cannot be offset by income taxes, and provincial sales and premium taxes) has increased the burden on this sector and not left it well positioned to deal with this increased competition.

Appendix A: An Economic Approach to Evaluating the Taxation of Financial Institutions¹

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An Economic Approach to Evaluating the Taxation of Banks: Theory

In order to examine the impact of taxes on the competitiveness of financial institutions, we modify an approach that has been utilized to investigate similar issues in other industries. The details of the approach, and its mathematical formulation, are contained in a subappendix. Here, the basic idea behind the approach is sketched out. An overview is provided first, followed by an example to illustrate the methodology.

Overview

The approach is consistent with standard microeconomic models of profit maximizing firms. Microeconomic models of financial institutions (primarily banks) have been developed by others in different contexts,² however, they have not previously been utilized to explicitly investigate the taxation of financial institutions. The approach advocated here brings together two here-to-fore unrelated strands of literature – the so-called "industrial organization" (IO) approach to the microeconomic modeling of banks, and the marginal effective tax rate (METR) approach to measuring the incentive and competitive effects of taxes³. By bringing these two strands of literature together in an investigation of the taxation of financial intermediaries, the approach is thus relatively innovative and unique.

The IO approach to the micro modeling of banks presumes that banks provide intermediation services to their customers in the form of loans and deposits. A bank may be viewed as pursuing its profit maximizing objective in two stages. The first stage is the cost minimization stage, whereby the bank seeks to employ inputs, such as labour and capital, so as to minimize the cost of "producing" a given amount of loans and deposits according to some "production technology." From this first stage, one may determine the marginal cost associated with issuing one more dollar of loans or deposits. In the second stage the bank maximizes its profits by issuing loans and deposits up to the point where the marginal revenue arising from loaning one more dollar or taking one more dollar in deposits is just equal to the marginal cost of intermediating that loan or deposit, as determined in the first stage.

¹ Prepared for the Financial Services Task Force, with funding from the Technical Committee on Business Taxation, Department of Finance Canada. The conclusions are those of the author and should not be attributed in any way to either the Task Force, the Technical Committee or the Department of Finance.

² For an overview see Freixas and Rochet (1997).

³ See McKenzie, Mintz and Scharf (1997).

The IO approach may be used to examine banks operating under various types of market conditions – from perfectly competitive markets, where a large number of banks act as a "price takers" in the market for loans and deposits, to oligopolistic markets where a few large banks dominate the market, to a sole bank monopoly. The approach can also accommodate various assumptions regarding the "production technology" facing the bank, including the possibility of economies of scale and economies of scope. Economies of scale arise when the average cost associated with providing loans or deposits declines as the dollar value of the loans and deposits increases. Economies of scope arise when it is cheaper to provide loans and deposits (or various other products and services) together than separately.⁴

An interesting aspect of the approach to modeling financial institutions adopted here is that the relationship between loans and deposits that exists in more traditional approaches is broken. In those models, loans are financed exclusively by deposits. In the model developed here, loans may be financed out of either deposits or equity (retained earnings and new share issues), and the traditional constraint connected changes in loans to changes in deposits is not required. Indeed, at the margin a profit maximizing bank will be indifferent between financing an additional dollar of loans with either deposits or equity (see subappendix A). This suggests that deposits are not a "cheap" source of funds for banks, as is suggested in more traditional models of financial institutions.

As the name suggests, the METR approach to measuring the incentive effects of taxes focuses on the impact of taxes on marginal or incremental decisions. This focus on the margin is vital if one is studying the impact of taxes in an optimizing framework. Profit maximizing financial institutions determine the optimal amount of an activity to undertake by looking at whether or not an incremental unit of that activity will increase its profits. As discussed above, for example, profit maximization involves issuing loans up to the point where the marginal revenue from the last dollar lent is just equal to the marginal cost of providing the loan. Since marginal costs (eventually) increase with the total amount of loan activity, any further expansion in loan activity past the point where marginal costs equal marginal revenues will result in the lower profits.

The METR approach focuses on how the tax system affects these marginal decisions, for example by altering marginal revenues and marginal costs. The METR approach may be applied to determine how taxes influence bank decisions in both the cost minimizing and profit maximizing stages discussed above.

For example, in the first (cost minimizing) stage various taxes levied on banks, such as the corporate income tax (CIT), the large corporations tax (LCT), the large financial institutions capital tax (LFICT), various provincial capital taxes (PCT), and payroll taxes levied on employers, can be viewed as increasing the cost of the inputs used in the "production" of loans and deposits. A METR may be calculated for each input used in the production of loans and deposits using standard techniques⁵ – e.g., a METR on labour and a METR on physical capital

⁴ Economies of scope are not considered in the formulation that follows, although it is an interesting issue that may be considered in future formulations.

⁵ See Boadway (1987).

(such as buildings, land, machinery and equipment, such as computers, ATMs, etc.). These METRs measure the taxes that arise from the employment of a marginal unit of the input. The tax induced increase in the cost of hiring labour and capital lead in turn to an increase in the marginal cost of providing an additional dollar of loans or deposits. Using an approach suggested by McKenzie, Mintz and Scharf (1997), the tax induced increase in the marginal cost of "producing" an incremental loan or deposit can then be determined. The resulting marginal effective tax rate on loan (or deposit) cost (METR on loan (or deposit) cost) tells us how much the tax system increases the cost of providing an incremental loan or deposit. It can be thought of as the aggregation of the various taxes levied on the inputs into the production of loans and deposits into an effective excise tax rate on (marginal) costs.

In the second (profit maximizing) stage, recall that the firm issues loans and deposits up to the point where marginal revenue is equal marginal cost. In the presence of taxes, the firm issues loans and deposits up to the point where after-tax marginal revenues are just equal to after-tax marginal costs. The CIT, LCT, LFICT and PCT all lower the marginal revenue from issuing another loan or taking another deposit. The tax induced increase in the marginal cost of producing loans and deposits is captured by the METR on loan and deposit costs. The equality between after-tax marginal revenues and costs may be used to compute METRs on loans and deposits. These METRs measure the tax wedge driven between the before- and after-tax rates of return required by financial markets on bank loans and deposits.

An Example

A simple example will help clarify the methodology. Some of the details of the derivation will be glossed over in the example, but it should serve to illuminate the idea behind the approach. While some mathematical notation is employed, it is kept to a minimum. The example will focus on loans; a similar approach may be toed for deposits.⁶ Subappendix A includes a more formal derivation.

It is easiest to begin by considering a profit maximizing bank in the complete absence of taxes. As discussed above, the bank will issue loans up to the point where the marginal revenue generated from issuing one more dollar of loans is equal to the marginal cost of providing that loan. This is represented by the following equation,

$$r_L = MC_L(l)(\rho + f) \quad (1)$$

The left hand side of the equation is the marginal revenue from issuing a one dollar loan, which is simply equal to the interest rate charged on that loan, r_L . The right hand side is the marginal cost of the loan. It consists of the product of two parts. $MC_L(l)$ is the marginal cost of

⁶ For simplicity it is presumed here that the bank is a price taker in the loan market.

"producing", or "intermediating", that one dollar loan, using labour and physical capital. In general, the marginal cost depends upon the cost of hiring labour and capital, but for simplicity it is written as a function only of the total dollar amount of loans issued in the period, l . As mentioned above, the marginal cost of issuing an incremental loan is typically thought to increase as the amount of loans issued increases. The marginal cost of producing an additional dollar in loans is multiplied by $(\rho + f)$, where ρ is the rate of return required by the bank's shareholders and f is the loan loss rate. In order to attract financial capital, banks must provide a rate of return just equal to the minimum rate required by its shareholders, which is equal to the rate of return they could earn by investing in an alternative activity. The requirement to generate this rate of return can be thought of as a (opportunity) cost that must be covered by the return to new loans. Loan losses constitute another cost to the bank which must be covered by the return to new loans. The right hand side of the equation thus represents the marginal cost of issuing a one dollar loan, which includes the cost of intermediating the loan, the return required by the financial market (shareholders), and loan losses.

Equation (1) may be re-written in a perhaps more illuminating fashion, by expressing it in rate of return form by dividing through by the marginal cost of "producing" a loan, as follows

$$r^n = \frac{r_L}{MC_l(l)} - f = \rho \quad (2)$$

This expression gives the rate of return on an incremental loan (the return to the loan divided by the cost of producing it) net of loan losses f (and taxes), which is simply equal to the rate of return required by financial markets, ρ . In this form, the equation states that the firm issues loans up to the point where the (net of loan loss) rate of return generated by a marginal loan is just equal to the rate of return required by financial markets.

Now consider the imposition of a tax system. Consider, in particular, a very simple system with the following features: a payroll tax is levied on labour; capital expenditures are written-off over time at some statutory capital cost allowance (CCA) rate; the statutory corporate tax: rate is μ ; loan losses are fully deductible; and a capital tax is levied at rate t on a base consisting of shareholder equity. Shareholder equity is equal to assets less liabilities, which for our purposes is simply equal to loans plus the net capital stock less deposits. This is clearly an oversimplification of the tax system in Canada (not to mention the balance sheet of a typical financial institution), but will serve for illustrative purposes.

As discussed above, and without going into details, the CIT, capital taxes and payroll tax can be viewed as increasing the cost of the labour and physical capital used to "produce", or "intermediate", loans. For our purposes, simply represent the resulting increase in the marginal cost of intermediating loans by the METR on loan costs, T_L . This METR on loan costs will reflect the METRs on labour and physical capital suggested by the tax system outlined above.

For simplicity, the derivation of these METRs is left for the technical subappendix. The after-tax marginal cost of intermediation on the right hand side of equation (1) thus becomes $MC_I(l)(1+T_L)$.

Two other features of the tax system affect the marginal cost of issuing a one dollar loan. The first is the deductibility of loan losses. This feature lowers the marginal cost of an incremental \$1 loan by μf as this is the tax saving which accrues to the bank as loan losses are deducted. The second is the capital tax which arises as the loan is issued; this increases the marginal cost of the loan by the capital tax rate t .

With revenues from interest on loans taxed at the rate μ , the after-tax return to issuing a one dollar loan is simply $r_L(l-\mu)$. The resulting expression which equates the after-tax marginal revenue from issuing an incremental one dollar loan to its after-tax marginal cost is,

$$r_L(l-\mu) = MC_I(l)(1 + T_L)(\rho + f) - \mu f + t \quad (3)$$

This expression may be re-written in terms of a rate of return, to give the tax adjusted analog to equation (2), as follows

$$r^g = \frac{r_L}{MC_I(l)} - f = \frac{r_L(1 + T_L)(\rho + f)}{r_L(l-\mu) - t + \mu f} - f \quad (4)$$

Equation (4) is gross-of-tax (but net of loan losses) rate of return on EL marginal loan required by financial markets. An incremental loan that earn r^g before corporate taxes will earn r^n after taxes.

The marginal effective tax rate on loans issued by the bank is defined as the hypothetical tax rate, that if applied to the gross-of-tax rate of return, given by equation (4), will yield the net-of-tax rate of return required by the financial market, given by equation (2). The METR on loans is thus given by the τ_L that solves $(1-\tau_L)r^g = r^n$, or

$$\tau_L = \frac{r^g - r^n}{r^g} \quad (5)$$

Putting some numbers to this example will further clarify matters. Say that the minimum rate of return required by financial markets on an investment in the bank (ρ) is 10%. Then, using equation (2), the required net of tax rate of return (r^n) on the last dollar loan issued by a profit maximizing bank is 10%. This is the rate of return an incremental bank loan must generate after the payment of all taxes at the firm level.

Say that the METR on loan costs, T_L , is 25%. Recall that this is the effective increase in the marginal cost of "producing" or "intermediating" a loan due to the imposition of the corporate income tax, capital taxes and payroll taxes. With an interest rate charged on loans of $\tau_L=8\%$, a loan loss rate of $f=1\%$, a corporate tax rate of $\mu=50\%$, and a capital tax rate of $t=2\%$, using equation (4) the gross of tax rate of return (r^g) required on the last dollar loan issued by the bank is 44%. Thus, using equation (5), the METR on loans implied by this simplified tax system is 76.74%. This is the effective rate of tax levied on the before-tax rate of return required by the financial markets suggested by the example tax system. As we shall see, a more detailed modeling of the tax system yields similar results.

An Economic Approach to Evaluating the Taxation of Financial Institutions: Application

The basic theory outlined in the previous section may be used to evaluate the taxation of loan making financial institutions in Canada and elsewhere. In this section, the methodology is applied to compare the impact of taxation on banks, credit unions, and non-financial institutions that grant loans in Canada. Each of these loan granting institutions face different tax treatment, so it is important to determine the extent to which the tax system results in a "level playing field" among them. The model is also applied to banks operating in the United States.

Although the model clearly over-simplifies the tax and economic environment facing banking institutions, it does capture most of the important provisions governing the taxation of financial institutions that have been highlighted in many previous studies of the taxation of financial institutions. This includes important features of the corporate income tax system in Canada such as the treatment of physical capital, the treatment of loan losses, the deductibility and taxability of interest, etc. Payroll taxes levied on labour by the federal government to finance the Canada Pension Plan (CPP) and Employment Insurance (EI), as well as provincial payroll taxes for health and education are included as well. Since these taxes are typically split between employees and employers, some assumption regarding the incidence of payroll taxes is required. For our purposes, the economic incidence of payroll taxes is presumed to coincide with the statutory incidence. This implies that roughly half of these taxes are assumed to be borne by employers and the other half by employees.⁷ Provincial sales taxes (PST) and the GST are also incorporated into the model. This is relevant because PST is levied at the retail level PST and banking is largely tax exempt under the GST. This results in some sales taxes being levied on business inputs. Also, capital taxes levied on financial institutions at both the federal level and provincial level are incorporated – including the large corporation tax (LCT), and the large financial institutions capital tax (LFICT) levied by the federal government, and various capital taxes levied by provincial governments. Because tax laws, in particular corporate income tax rates and capital tax rates, vary across the provinces the calculations reflect the tax systems in British Columbia, Ontario and Quebec; a weighted average is then taken using weights of 20%, 50% and 30%

⁷ See McKenzie, Mansour and Brule (1998)

respectively⁸. Similar tax provisions are incorporated for the U.S.⁹ The tax provisions that are incorporated into the model, as well as some of the other data used in the calculations, are discussed in more detail in subappendix B.¹⁰

As indicated, while representative, the features of the tax system that are incorporated into the model are by no means exhaustive. In particular, issues such as the tax treatment of international banking services, though important, are not dealt with. Moreover, various reductions in capital taxes allowed by the provinces, and some of the differences between the capital tax bases, are not fully represented. Finally, various "tax planning" activities that may be undertaken by financial institutions, and which may substantially affect the amount of taxes that they pay, are not incorporated into the analytical framework.

Table 1 presents the METRs on marginal loan costs and loans for Canadian financial institutions, including large banks, credit unions, and non-financial lending institutions. Calculations are also presented for banks operating in the U.S. The calculations follow the basic methodology outlined in section I. Large corporations pay the greater of the LCT and federal corporate surtax, and the greater of the LFICT and the federal corporate income tax. As such, for large Canadian institutions (banks and nonfinancials) calculations are presented for two cases: the case where the institution is presumed to pay the LCT and LFICT, and the case where it is not.

Looking first at banks in Canada for the case where LCT and LFICT are paid, note that the METR on the marginal cost of producing loans is 31%.¹¹ This means that the various taxes levied on labour and capital employed in the banking sector increase the cost of producing a marginal loan by 31%. A large part of the METR on marginal loan costs arises because of federal and provincial capital taxes. Eliminating all capital taxes lowers the METR on marginal costs to 22%. The METR on loans issued by large banks is 78%. As discussed above, this is the effective rate of tax levied on the before-tax rate of return required by the financial markets suggested by the tax system in Canada. Capital taxes play a major role here as well, as the METR on loans drops to 64% if capital taxes are eliminated from the calculations. If banks are assumed not to pay the LCT or LFICT (but still pay provincial capital taxes), the METR on costs drops to 26% and the METR on loans drops to 72%.

Turning now to Canadian credit unions, it is evident that they face much lower METRs on both loans and loan costs. The METR on the marginal cost of producing a loan by a Canadian credit

⁸ These weights are based upon a study by KPMG (1997).

⁹ For the U.S. tax parameters from the states of California, New York and Illinois are used. The relevant tax parameters are taken from KPMG (1997).

¹⁰ Property taxes are not incorporated for either Canada or the U.S. due to the lack of market data required to determine effective property tax rates.

¹¹ The METR on cost is calculated under the assumption that the intermediation technology is Cobb-Douglas and that labour's share of total costs in the financial sector is 75 percent and capital's share is 25 percent. See McKenzie, Mintz and Scharf (1997).

union is 19%, twelve percentage points lower than a federal capital tax paying Canadian bank. Moreover, the overall METR on marginal loans made by credit unions is 62%. These calculations suggest that the Canadian tax system provides a competitive advantage to credit unions over banks. The reason for the lower METRs is two-fold. First, credit unions in Canada face substantially lower corporate income tax rates at both the federal and provincial level. Providing that certain conditions regarding size of taxable income relative to the amount advanced to its members are satisfied, credit unions face a federal tax rate sixteen percentage points lower than banks. Similar reductions occur at the provincial level, ranging from about three to five percentage points. Most credit unions in Canada satisfy these requirements, and therefore the reduced rates were used in the calculations for Table 1. The second reason that the METRs on Canadian credit unions are lower than banks is that, by virtue of the size of most credit unions, they do not face either the federal LCT or LFICT. Provincial capital taxes are, however, levied on credit unions. If provincial capital taxes were eliminated, the METR on costs for Credit Unions would drop to 14% and the METR on loans would drop to 50%.

Nonfinancial institutions in Canada often provide credit to customers to finance purchases of goods and services. The obvious example is loans made for car purchases. The METRs on marginal costs and loans made by these institutions are reported in the third row of Table 1. The METR on the marginal cost of producing a loan in the case of an LCT paying nonfinancial institution is 25% while the METR on loans is 69%. Thus, we see that the tax system in Canada impinges upon the competitiveness of the loan activities of nonfinancial institutions to a lesser degree than it does for Canadian banks, but a slightly greater extent than credit unions. The reason for this is that while it is presumed in the calculations that the nonfinancials face the same statutory corporate tax rate as banks, which is higher than credit unions, they face a substantially different capital tax regime. Like banks, but unlike credit unions, the nonfinancials are presumed to face the LCT; however, the LFICT is not levied on these institutions. Moreover, while some provincial capital taxes apply to nonfinancials, the rates are somewhat lower than for financial institutions. For non-LCT paying nonfinancials the METR on costs drops 23% and the METR on loans to 67%. If all capital taxes were eliminated, the METR on costs would be 21% and the METR on loans 64%.

It is interesting for comparative purposes to apply the model to the taxation of banking institutions in the U.S. The last row of Table I presents the relevant calculations for large banks in the U.S. The METR on cost facing U.S. banks is 25% and the loan METR is 67%. Thus, U.S. banks face METRs slightly higher than Canadian credit unions, comparable to Canadian LCT paying nonfinancials, and substantially lower than LCT/LFICT paying Canadian banks. There are some aspects of the taxation of banks in the U.S. that put them at a competitive disadvantage to Canadian banks and some that put them at a competitive advantage; from Table 1 it is evident that on balance the latter outweigh the former. The U.S. banks modeled in Table 1 actually face slightly higher total corporate income tax rates than the Canadian banks. This is due to the higher federal rate in the U.S. and the fact that New York city levies a local income tax on top of the federal and state income tax.¹² Thus, although state income tax rates tend to be lower than

¹² Local and state income taxes in the U.S. are deductible for federal tax purposes, and local taxes are deductible for state tax purposes.

provincial income tax rates, overall the income tax rate facing banks is slightly higher in the U.S. Another aspect of the taxation of banking in the U.S. that puts them at a disadvantage relative to Canadian banks is the treatment of loan losses. In Canada, 90% of reserves for loan losses may be deducted immediately and 10% must be delayed until the losses are realized. The Canadian Bankers Association estimates that the average delay is about two years.¹³ This two year delay lowers the present value of the loan loss deduction. In the U.S., loan losses are delayed until realization; the same two year delay is assumed in the calculations. This lowers the present value of loan loss deductions in the U.S. relative to Canada. However, despite these advantages, Canadian banks clearly face some disadvantages relative to their U.S. counterparts. Of vital importance again is the presence of capital taxes in Canada. In the U.S. no federal capital tax is imposed upon banks. As discussed above, some Canadian banks face both the LCT and LFICT at the federal level. Also, there is no capital tax levied in California or Illinois and only a small capital tax in New York. On balance, the tax disadvantage faced by Canadian banks due to the absence of capital taxes outweighs any benefits on the income tax side, with the net effect that Canadian banks are at a tax induced competitive disadvantage relative to their U.S. counterparts. Note, however, that for non-LCT/LFICT paying banks in Canada, the METR on costs and the METR on loans are much closer to the U.S.

Concluding Comments

The purpose of this note has been to describe a methodology for calculating marginal effective tax rates (METRs) on loans issued by financial and nonfinancial institutions and apply this methodology to institutions in Canada and the U.S. Two types of METRs were developed. The first, the METR on the marginal cost of issuing a loan, measures the increase in the marginal cost of issuing a loan caused by the tax system. The second, the METR on loans, measures the effective rate of tax applied to the before-tax rate of return on a marginal loan.

The methodology was applied to banks, credit unions, and loan granting nonfinancial institutions in Canada, as well as to banks in the U.S. The calculations yield the following conclusions. Canadian banks paying the LCT and LFICT face much higher METRs than credit unions or nonfinancials. This places them at a tax induced competitive disadvantage in the domestic market place. While banks may have many other competitive advantages over credit unions and nonfinancials, these results suggest that these are at least partially offset by the tax induced competitive disadvantages. There is clearly not a level playing field in the tax treatment of lending activity in Canada. Canadian banks also face a tax induced competitive disadvantage relative to banks operating in the U.S. However, much of the tax induced competitive disadvantage faced by Canadian banks disappears when they do not pay the LCT and LFICT. It would appear to be the presence of capital taxes levied on banks more than anything else that places them at a tax induced competitive disadvantage.

¹³ See KPMG (1997).

Table I
Marginal Effective Tax Rates
(percent)

| | METR on Costs | | | METR on Loans | | |
|----------------|---------------|-----------------|------------------|---------------|-----------------|------------------|
| | Capital Taxes | No LCT or LFICT | No Capital Taxes | Capital Taxes | No LCT or LFICT | No Capital Taxes |
| Banks | 31 | 26 | 22 | 78 | 72 | 64 |
| Credit Unions | 19 | N/A | 14 | 62 | N/A | 50 |
| Non-Financials | 25 | 23 | 21 | 69 | 67 | 64 |
| U.S. Banks | 25 | N/A | N/A | 67 | N/A | N/A |

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Subappendix A: Methodology

The bank's problem is to choose the amount of labour and capital devoted to loan and deposit intermediation in order to maximize the present value of its profits. The simplest formulation ignores economies of scope between loan and deposit intermediation; that is the approach adopted here. The firm's problem may be stated as choose the amount of labour (N_L) and capital investment (I_L) devoted to the intermediation of loans, and the amount of labour (N_D) and capital investment (I_D) devoted to the intermediation of deposits, so as to¹⁴

$$\text{Max} \int_0^{\infty} e^{-pt} [r_L L - (r_D + i - s)D - wN_L - wN_D - ql_L - ql_D - T_c - T_I - T_p] dt \quad (\text{A1})$$

where r_L the interest rate charged on loans, L is the total dollar value of outstanding loans, r_D is the interest rate paid on deposits, i is the deposit insurance rate, s is the service charge rate for deposits, w is the wage rate, q is the price of a unit of capital (assumed to be the same for loan and deposit capital), and T_c , T_I and T_p are capital taxes, income taxes and payroll respectively. Taxes are determined by the following equations:

$$T_c = t_c [B_L + B_D + L - D] \quad (\text{A2})$$

$$T_I = \mu [r_L L - (r_D + i - s)D - wN_L - wN_D - \alpha A_L - \alpha A_D - fL - T_p] \quad (\text{A3})$$

$$T_p = t_p w (N_L + N_D) \quad (\text{A4})$$

where t_c , is the capital tax rate, B_L and B_D are the values of physical capital associated with loan and deposit intermediation for capital tax purposes, μ is the corporate tax rate, α is the declining balance capital cost allowance rate applied to expenditures on physical capital associated with loan and deposit intermediation, A_L and A_D are the undepreciated capital costs of capital associated with loan and deposit intermediation, f is the loan loss rate, and t_p , is the payroll tax rate.

¹⁴ Time indexes are omitted for simplicity. Also for simplicity, the bank is presumed to be all equity financed and there is no inflation; inflation is incorporated into the calculations shown in Table 1.

The equations of motion that describe changes in the state variables are:

$$\dot{L} = l(N_L - K_L) - fL \quad (\text{A5})$$

$$\dot{D} = d(N_D - K_D) \quad (\text{A6})$$

$$\dot{A}_D = qI_D - \alpha A_D \quad (\text{A7})$$

$$\dot{A}_L = qI_L - \alpha A_L \quad (\text{A8})$$

$$\dot{B}_D = qI_D - bB_D \quad (\text{A9})$$

$$\dot{B}_L = qI_L - bB_L \quad (\text{A10})$$

$$\dot{K}_D = I_D - \delta K_D \quad (\text{A11})$$

$$\dot{K}_L = I_L - \delta K_L \quad (\text{A12})$$

where $l(N_L, K_L)$ is the loan intermediation production function (l is the flow of new loans at time t), $d(N_D, K_D)$ is the deposit intermediation production function, b is the depreciation rate for capital tax purposes, and δ is the economic depreciation rate on physical capital.

Rolling the tax definitions ((A2), (A3) and (A4)) into equation (A1) gives,

$$\text{Max} \int_0^{\infty} e^{-\rho t} [(r_L(l-\mu) - t_c + \mu f)L - ((r_D + i - s)(l-\mu) - t_c)D] \quad (\text{A13})$$

$$- w(l + t_p)(l-\mu)N_L - w(l + t_p)(l-\mu)N_D - qI_L - qI_D - t_c B_L - t_c B_D + \mu \alpha A_L + \mu \alpha A_D] dt$$

The bank's problem may be solved in two stages: first, choose the amount of labour and capital to employ in loan and deposit intermediation so as to minimize the cost of producing a given amount of loans and deposits; second, choose the amount of loans and deposits to produce every period in order to maximize profits.

The cost minimization problem is to choose N_L , N_D , I_L and I_D to as to

$$\text{Min} \int_0^{\infty} e^{-\rho t} [w(l + t_p) (l - \mu)N_L + w(l + t_p) (l - \mu)N_D + qI_L - qI_D - T_c B_L - T_c B_D - \mu\alpha A_L - \mu\alpha A_D] dt \quad (\text{A14})$$

subject to

$$l = l(N_L, K_L)$$

$$d = d(N_D, K_D)$$

and the equations of motion in (A7)-(A12)

Evaluating the resulting first-order conditions in the steady state yields, after some manipulation,

$$\frac{\partial \mu \partial K_L}{\partial l \partial N_L} = \frac{q(\rho + \delta)(1 + \tau_K)}{w(1 - t_N)} \quad (\text{A15})$$

$$\frac{\partial d \partial K_D}{\partial d \partial N_D} = \frac{q(\rho + \delta)(1 + \tau_K)}{w(1 - \tau_N)} \quad (\text{A16})$$

where $\tau_K = (r^g - r^n)/r^n$ is the METR on loan and deposit capital, $r^g = (\rho + \delta)(1 + t_c)/(\rho + b) - \mu\alpha/(\rho + \alpha)$, $(l - \mu) - \delta$ is the gross of tax required rate of return on capital, and $r^n = \rho$ is the net of tax required rate of return on capital, and $\tau_N = t_p$ is the METR on labour.¹⁵

Equations (A15) and (A16), along with the production functions for loan and deposit intermediation generate conditional input demand functions for labour and capital employed in loan and deposit intermediation. These conditional input demand functions may then be used to determine the contemporaneous cost of producing a given amount of loans or deposits, expressed as a function of the METRs on labour and capital $C_L(l; w(1 + \tau_N), q(\rho + \delta)(1 + \tau_K))$ and $C_D(d; w(1 + \tau_N), q(\rho + \delta)(1 + \tau_K))$ for loans and capital respectively.

¹⁵ Note that the METRs on loan and deposit physical capital are expressed relative to the net of tax rate of return r^n rather than the gross of tax rate of return r^g . This is somewhat different that is traditional in the METR literature. See McKenzie, Mintz and Scharf (1997) for a discussion.

The profit maximization stage involves choosing the amount of loans and deposits to intermediate in order to,

$$\begin{aligned} \text{Max} \int_0^{\infty} e^{-pt} [(r_L L (1-\mu) - t_c + \mu f) L - (r_D + i - s)(l-\mu) - t_c) D \\ - C_L(l; w(I + \tau_N), q(\rho + \delta)(I + \tau_K)) - C_D(d; w(I + \tau_N), q(\rho + \delta)(I_{\text{ext}}))] dt \end{aligned} \quad (\text{A17})$$

subject to

$$\dot{L} = l - fl$$

$$\dot{D} = d$$

Evaluating the resulting first-order conditions in the steady state yields, after some manipulation,

$$r_L^g \frac{r_L}{MC_L^0(l)} - f = \frac{r_L(1 + T_l)(\rho + f)}{r_L(l-\mu) - t_c + \mu f} - f \quad (\text{A18})$$

$$r_D^g \frac{-(rD + i - s)}{MC_D^0(d)} = \frac{(r_D + i - s)(1 + T_D)\rho}{(r_D + i - s)(l-\mu) - t_c} \quad (\text{A19})$$

MC_L^0 and MC_D^0 are the before tax marginal costs of intermediating an additional loan or deposit, and MC_L^T and MC_D^T are the after-tax counterparts; $T_j = (MC_j^T - MC_j^0)/MC_j^0$, $j=L$ or D is the METR on the marginal cost of producing an incremental loan or deposit.¹⁶

Using the gross-of-tax required rates of return on loans and deposits given in (A18) and (A19), the METR on an incremental loan or deposit is given by,

$$t_j = \frac{r_j^g - r_j^n}{r_j^g} \quad (\text{A20})$$

where $r_L^n = r_D^n = p$.

¹⁶ In order to calculate MC_j the cost function must be parameterized. In the calculations a Cobb-Douglas parameterization is employed; see McKenzie, Mintz and Scharf (1997).

As discussed in the text, an interesting aspect of the approach to modeling financial institutions adopted here is that the traditional relationship between loans and deposits that exists in more traditional approaches is broken. Loans may be financed out of either deposits or equity (retained earnings and new share issues) and the traditional constraint connected changes in loans to changes in deposits is not required. This suggests that deposits are not necessarily a "cheap" source of funds for banks, as is suggested in more traditional models of financial institutions. Indeed, at the margin a profit maximizing bank will be indifferent between financing an additional dollar of loans with either deposits or equity. To see this, for simplicity set the tax parameters T_D , μ and t_σ in equation (A19) equal to zero, and note that deposits are raised up to the point that $(r_D + i - s)/MC_D^o(d) = p$, so that at the margin the total cost of financing loans through deposits is equal to the cost of equity finance.

Subappendix B: The Taxation of Financial Institutions

As indicated in the text, the methodology does not incorporate all of the features of the tax system as it relates to financial institutions, but it does incorporate most of the more relevant features. The purpose of this appendix is to present the assumptions made regarding the tax parameters and other data required to make the calculations.

Payroll Taxes

The payroll taxes incorporated into the model include CPP and EI taxes and provincial payroll taxes. Effective payroll tax rates were taken from calculations undertaken by the Department of Finance in support of the Technical Committee on Business Taxation (see McKenzie, Mansour and Brule (1998)). The approach involves calculating effective payroll tax rates for various income groups and constructing a "hybrid" marginal worker by taking a weighted average of these rates using wage distributions determined in the Department of Finance. For Canada, the effective payroll tax rate using these rates are 10.11% for B.C., 9.25% for Ontario and 12.4% for Quebec. A similar approach was used for the B.C., 9.25% again using Department of Finance data. The rate used for U.S. was 9%.

Sales Taxes

Because many of the activities of financial institutions are tax-exempt for GST purposes, inputs purchased by these institutions bear some sales tax. Calculations by KPMG (1997) suggest that the effective GST rate on banks is 6.4%. This rate was presumed to apply to bank and credit union purchases of equipments only, and did not impose upon investments in buildings and structures. Purchases of physical capital by non-financial institutions do not bear the sales tax.

The Department of Finance has calculated that investments in machinery and equipment also bear an effective provincial sales tax rate in the order of 1.5% (see McKenzie, Mansour and Brule (1998)) Similar estimates in the U.S. put the rate at about 1%.

Federal Capital Taxes

The full LCT rate of .225% was applied to banks and nonfinancials. Corporations pay the higher of the LCT or the surcharge on income tax. The LCT was presumed not to apply to credit unions by virtue of their size.

The LFICT of 1.25% and the surcharge of .15% was applied banks, but not credit unions or nonfinancials. Corporations must pay the larger of the LFICT or federal income tax.

U.S. banks do not pay federal capital taxes.

Provincial Capital Taxes

B.C., Ontario and Quebec all levy capital taxes at rates of 3%, 1.12% and 1.28% respectively. Ontario levies a surcharge of 0.112% on large institutions. These rates were applied to both banks and credit unions. Quebec also levies a "compensatory tax" of .25% on banks; this was applied to banks but not credit unions.

Nonfinancials were presumed to face capital tax rates of .3% in B.C. and Ontario and .64% in Quebec.

New York levies a state capital tax of .09%, while no capital tax on banking activities is levied in Illinois or California.

Federal Income Taxes

Banks and nonfinancials were presumed to face a statutory tax rate of 29.12%, including the surtax. Credit Unions pay federal taxes at a surtax inclusive rate of 12.48%, so long as their taxable income does not exceed 6 2/3% of the amount advanced by its members. KPMG (1997) reports that most credit unions qualify for this reduced rate.

The U.S. federal tax rate is 35%.

In Canada, it was presumed that 90% of loan losses may be deducted immediately and 10% deducted after two years. In the U.S. it was presumed that loan loss deductions were delayed by two years.

For the treatment of capital, a capital cost allowance rate of 15% was used for physical capital. This is calculated as a rough weighted average of the CCA rate on machinery and structures based upon data from the Department of Finance.

Provincial Income Taxes

Provincial tax rates applied to banks in B.C., Ontario and Quebec are 16.5%, 15.5% and 8.9% respectively. The rates applied to Credit Unions are 9%, 10% and 5.75% respectively. The rates applied to nonfinancials are 16.5%, 13.5% and 8.9% respectively.

In the U.S. the state tax is 7.13% in Illinois, 10.75% in New York (which includes a New York City surcharge of 1.53% and 11.3% in California. New York City levies an additional income tax of 8.85%. State taxes are deductible for federal tax purposes.

Other Data

An interest rate on loans of 8.8% was assumed. This was calculated from the financial statements of several large Canadian banks.

A loan loss rate of 2.2% was assumed, also based on bank financial statements.

A labour/capital ratio of .75 was, employed, based upon data obtained from the Department of Finance.

Appendix B: Memorandum

July 21, 1997

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MEMORANDUM

Study on Impact of Taxation on Financial Services Sector

BACKGROUND AND OBJECTIVES OF STUDY

The purpose of this memorandum is to solicit input from interested parties on the above-noted research project, which has been jointly commissioned by the Task Force on the Future of the Canadian Financial Services Sector and the Technical Committee on Business Taxation, both of which have been established by the Minister of Finance.

The study is being co-ordinated under the direction of Kevin J. Dancey. Mr. Dancey is Managing Partner of Tax Services at Coopers & Lybrand, and a former Assistant Deputy Minister of Finance (Tax Policy Branch) for Canada.

The study is examining the impact of major taxes paid by financial institutions to federal and provincial governments on the cost of providing financial services. In this context, it is focusing on the impact of major taxes on the relative competitive position of domestically-owned firms (both regulated and unregulated) supplying similar financial services, as well as on the competitive position of Canadian institutions operating internationally and/or in competition with foreign institutions in the Canadian marketplace. The analysis will attempt to focus on the impact of taxation on the provision of specific financial services functions (such as the provision of credit or loans) by various institutions, as opposed to focusing only on the institution as an entity. In short, the objective is to assess the extent to which the tax system detracts from the objective of a level playing field in the provision of financial services.

APPROACH TO BE TAKEN

Since the key focus of the study is on the impact of the tax system on "competitiveness", it is important to clarify what is meant by this term, which is not always well-defined, in the context of a study on taxes. A natural way to think about "competitiveness" is in terms of the "cost of doing business". Thus, in this study, we will be attempting to analyse the extent to which the tax system affects a firm's or industry's "cost of doing business".

We will use a variety of methods to assess the impact of the tax system on the cost of doing business. One way will be to use a modelling approach that has been applied to other sectors by the Department of Finance, the OECD and others that attempts to measure the extent to

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which the business tax regime adds to the marginal cost of producing an incremental unit of a good or service. This approach is conceptually appealing and should be flexible enough to accommodate a wide range of activities undertaken by financial institutions and incorporate many of the taxes levied thereon. However, like any methodology which seeks to quantify and compare the impact of the tax system on competitiveness, it must inevitably make a number of simplifying assumptions. Accordingly, economic modelling will only be one of the tools used in completing this study.

In order to supplement and complement the above-noted analysis, we need input from participants in the financial services sector. To that end, a series of questions have been set out below. We need answers to these questions that are as specific as possible and that focus on the significant or material issues. To the extent your answers are backed up by analysis, policy alternatives, examples, or international experience that would be helpful.

QUESTIONS

The questions on which we seek your input are as follows:

1. What is the impact of corporate income, capital and other significant taxes paid to federal and provincial governments in Canada on domestically-owned firms' cost of providing financial services functions and how does this affect their relative competitive position in providing such services? Please consider your competitive position in relation to other regulated and unregulated firms operating both within your own financial subsector as well as other financial sectors in addressing this question.
2. How does the Canadian tax system affect the cost of supplying financial services relative to foreign providers operating in the Canadian market? This comparison should also comment, if possible, on whether it appears that there are any major issues in the taxation systems of other key countries (and in particular the U.S.) that affect the competitive position of Canadian suppliers in the Canadian market, recognizing practical limitations that may restrict knowledge of foreign taxation systems.
3. What is the impact of corporate income, capital and other significant taxes paid to federal and provincial governments in Canada on the competitive ability of Canadian suppliers of financial services providing financial services in foreign markets? This comparison should focus on supplying financial services in the U.S. market.

In addition to the above questions, which deal with competitiveness, we ask that you address the following issue which deals with the potential conflict between tax planning on one hand and prudential regulation on the other:

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4. To what extent are there elements of the tax system that might motivate you to take actions driven by tax planning considerations which would conflict with the objectives of prudential regulation? How should the sometime diverging objectives of regulation and taxation be reconciled? Please provide examples in answering this question.

TIMING OF REPORT

We have been asked to report our findings in two stages.

- ♦ The first stage consists of the analysis of the differences in the impact of taxes on different types of domestic regulated and unregulated institutions together with an analysis of the behavioural responses of financial institutions on taxes that might conflict with prudential regulation. **October 31, 1997 is the deadline for this first stage.**
- ♦ The second stage deals with the comparisons with respect to the international competitiveness of Canadian institutions with foreign institutions in Canadian and foreign markets. **This stage must be completed by December 15, 1997.**

In order to meet these reporting deadlines, we need your input on the above questions, in addition to any other issues which you would like to raise, **by September 15, 1997**. We will keep all submissions confidential (unless confidentiality is specifically waived by you).

Your participation in this process is most appreciated. We look forward to receiving your comments.

Kevin J. Dancey

Managing Partner, Tax Services

Please forward your response to:

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